FEBRUARY • 1957
A McGRAW-HILL PUBLICATION
PRICE 35 CENTS

ELECTRICAL WHOLESALING

THE NATIONAL MAGAZINE OF ELECTRICAL WHOLESALE DISTRIBUTION

How Engineering Know-How Pays Off

page 66

Creative Selling — A Dead Duck? page 70

What Can You Do With a 90-Year Old Warehouse? page 81

Duke Imholt on *Operating the Branch* page 86

FOR MORE SALES, MORE PROFITS...SELL

APPLETON

INDUSTRY'S MOST ADVANCED LINE

EXPLOSION-PROOF EQUIPMENT

JUNCTION UNILETS

LIGHTING FIXTURES

RECEPTACLES

Explosion-proof electrical equipment is more important today than ever before. Manufacturers of material handling equipment are adding explosion-proof switches and connectors to machines to be used in hazardous areas. And, an ever increasing number of industrial plants are almost entirely equipped with explosion-proof electrical equipment. APPLETON's full line of explosion-proof equipment offers you the opportunity to capture your share of this new and lucrative market. You need never miss a sale, because APPLETON is...

TODAY, MORE THAN EVER...

The Standard for Better Wiring

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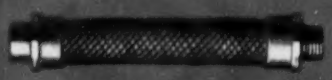

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CIRCUIT BREAKER UNILETS

Sold Exclusively Through Selected Wholesalers

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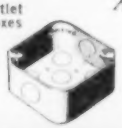
Also Manufacturers of

Industrial Lighting

Outlet Boxes



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Automatic Reelites

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Exclusive SPLIT SECOND TIMING Pays-Off in COMPLETE PROTECTION

This fuse **knows** exactly when to blow. The exclusive Econ-Alloy Thermo Element provides you with "timed" protection against overloads (up to 500%). This fuse also provides instantaneous breaking action on shorts.

Dual-Element Fuses have been specifically designed and engineered for use in motor, branch and feeder circuits. They are time and money savers where you have frequent surges of power or temporary overloads such as occur in high starting torque motor circuits. They often allow you to by-pass the installation of expensive circuit breaker equipment.

Dual-Element Fuses are available in sizes from 2" up to 13⅜"; 0 to 600 amps; for 250 and 600 volts—and in both knife blade and ferrule types. Listed by Underwriters' Laboratories.

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Write for ECON Dual-Element Catalog S-60 . . . or literature on all Economy Fuses.

SINCE 1911

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. . . every month, ads like this are telling your customers how Economy Fuses, available from you, pay-off in **complete** fuse protection. Be sure you can meet the growing demand . . . check your stock and don't miss out on a single sale.

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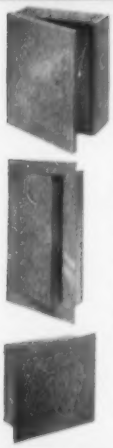
ECONOMY FUSE & MFG. CO., 2717 Greenview Avenue, Chicago 14, Illinois

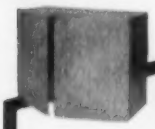
BOSS

JOB-ENGINEERED ELECTRICAL BOXES AND WIREWAY



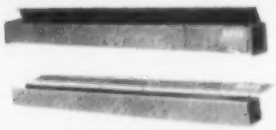
- **Build and maintain Customer Satisfaction**
- **Increase Sales and Profits**

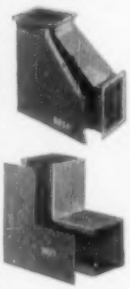
Job - engineered for quick, easy installations, BOSS boxes are code gauge steel, smooth corners, with firm but easy knockouts. Finished in durable gray baked enamel. Complete line, from 4½" x 5" x 3" to as large as needed. Surface or flush mount, with hinged or screw-on covers.



BOSS

FLANGED OR FLANGELESS WIREWAY WITH FITTINGS





BOSS Wireway and Fittings are easily adapted for "close fit" jobs where space is at a premium. Available in a wide range of sizes. Flangeless wireway is equipped with screw shields to protect wire as it is drawn through. Elbows, tees, closing plates. Telescoping fittings, nipples, hangers . . . these and other fittings are available in flanged wireway.

Better Buy BOSS . . . your all-in-one source for quality electrical boxes and wireway. Sold through distributors only. Write for catalog and complete information on the entire line.

THE HUENEFELD CO.

Cincinnati 25, Ohio, U.S.A.

LETTERS TO THE EDITOR

Quick Reaction

Dear Sir:

I'm sure that your new series "Tips On the Code" (EW—Jan. '57, p.81) will be of immense help to anyone who will take the time to read and study it. It is my intention to save them as issued.

It is nearly impossible for me to sit down and glean anything out of a Code book. But Mr. McDonald's coverage, it appears, will pinpoint the articles that I think are most controversial and I congratulate him for providing wholesaler salesmen everywhere an easy way to become an expert on the N.E.C.

J. C. BALLOWE
SALES REPRESENTATIVE
CHARLESTON ELEC'L SUPPLY CO.
CHARLESTON, W. VA.

. . . You have a terrific idea with unlimited possibilities for good and valuable information. Of course, the first article was a little elementary, as was necessary, but I am sure future chapters will improve as the author develops the subject.

We are so conscious of what the electrical wholesaler can do for the contractor-dealer, as well as the industrial customer, that we keep a graduate electrical engineer available at our service counter at all times . . .

JOHN M. NEWTON
PRESIDENT
OAKES ELEC'L. SUPPLY CO.
HOLYOKE, MASS.

. . . I am quite impressed with the wealth of knowledge such a series could give. You have it very effectively presented. . . I hope that you will be able to avoid a too technical discussion, for as you know we all are busy peddling day and night. . .

. . . I have never been an expert on the Code and certainly will spend more time studying your articles on the code regarding branch circuits and feeders. Spelling out the differences will be a big assist.

ALAN C. MCKERNAN
SALESMAN
SEAMANS SUPPLY CO. INC.
MANCHESTER, N. H.

. . . may I congratulate ELECTRICAL WHOLESALING on initiating its new series of articles on the National Electrical Code.

I feel certain that your readers will applaud this latest addition of a valuable service by ELECTRICAL WHOLESALING and will find it extremely helpful in their day-to-day selling.

A. W. HOOPER
EXECUTIVE DIRECTOR
NAED
NEW YORK, N. Y.

. . . This series looks very good—an excellent idea . . .

R. B. MULLER
TWIN STATE ELEC'L. SUPPLY CO.
WHITE RIVER JUNCTION, VT.

. . . The men in our organization tell me that "Tips on the Code" is right on the ball.

. . . You are giving the men of this industry what they want in the matter of this fundamental coverage of the changes in our Code. . .

IRVING P. BEAN
PRESIDENT
BEAN ELECTRIC CO.
SEATTLE, WASH.

EW welcomes expressions of opinion from readers. Address all correspondence to: The Editor, ELECTRICAL WHOLESALING, 330 W. 42nd St., New York 36, N. Y.

"Long Felt Need"

Dear Sir:

The January issue of ELECTRICAL WHOLESALING just hit my desk and "Operation Distribution Research" (page 89) caught my eye immediately. This study will fill a long felt need in our industry and I want a copy of Dr. Lewis' book as soon as it is published.

Dr. Lewis will no doubt be making a survey and mailing out questionnaires from time to time in his research. I certainly want to volunteer any information that he may want from wholesalers such as ourselves.

We have been in business for over 40 years; we keep rather adequate records and want to co-operate with Dr. Lewis in any way possible.

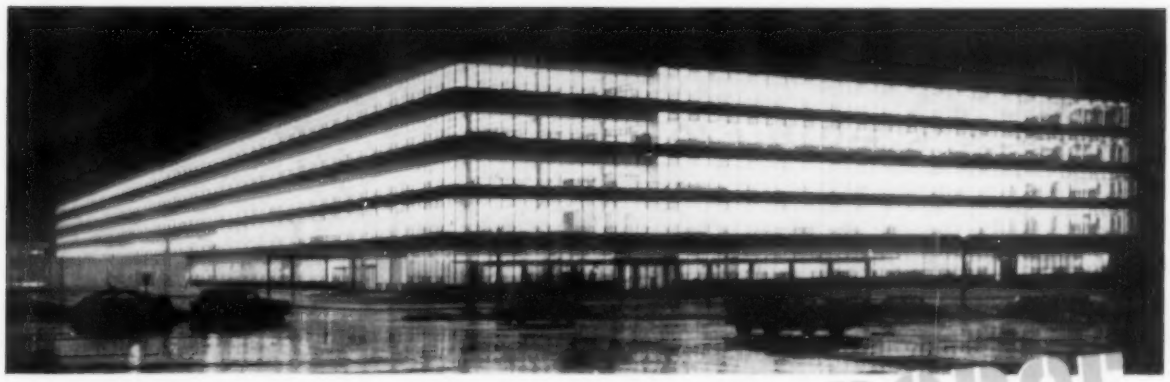
Congratulations on your sponsorship of this project.

CLIFF ROBINSON
PRESIDENT
ELECTRICAL SUPPLY CORP.
DALLAS, TEXAS

• *If you also desire to volunteer your cooperation in this project, please write to:*

Professor Edwin H. Lewis
Economics and Marketing Dept.
University of Minnesota
School of Business Administration
Minneapolis, Minnesota

New Home for Army Service Records



WIRE BY PHELPS DODGE

This modern AG Record Center building* in St. Louis, Mo., is virtually an oversized glass filing cabinet. Housed here are service records of 20,000,000 persons who have served in the Army or Air Force since the Civil War.

A dependable wiring system was an important part of the building's specifications. That's why Phelps Dodge wire and cable was installed.

On every wiring job, where top-quality materials, expert workmanship and experienced "know-how" are called for, *it pays to rely on Phelps Dodge and your Phelps Dodge distributor!*

*Joint General Contractors: Fruin-Colnon Contracting Co., St. Louis, Mo., and Peter Kiewit Sons' Co., Omaha, Neb., Electrical Contractor: Mack Electric Co., St. Louis, Mo.

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SQUARE D COMPANY
ELECTRICAL EQUIPMENT
TRINITY 2-0400 6060 RIVARD STREET, DETROIT 11, MICHIGAN

February, 1957

memo
TO OUR DISTRIBUTORS

In all February electrical trade journals we're running an ad that we recommend as mighty good reading. We begin the ad with a challenging statement--"We've yet to see 1 panelboard that can do 3 jobs right--at the right price."

We think the logic of this ad will make a lot of sense to the contractor and engineer. At the same time, it will re-emphasize an important fact to you--with Square D's three lines of merchandised panelboards, you are decidedly in the driver's seat!

Maybe you haven't looked the panelboard picture "straight in the eye" lately. Sometimes it's easy to overlook some of the fine products that build volume on a repeat sale basis. It took years to get your contractors and industrial customers in the habit of buying the MHP. Now its acceptance is universal and the volume continues to climb every month. These are "Repeat Sales!"

The NQO got a terrific reception from the very start and has been growing ever since. Recently, when we introduced the QO 3-pole breaker, we, too, had to sit down and take a fresh look. There are unlimited potentialities in a 3-pole breaker that plugs into a lighting panelboard chassis having true sequence bussing. The NQO is now a lighting panelboard; a distribution panelboard with up to 50 ampere, 3-pole breakers or 70 ampere, 2-pole breakers; or a combination lighting and distribution panelboard with balanced loads on all phases! For 600 volt applications you have the QMB--the acknowledged best fusible panelboard on the market.

This line-up, which you already have in stock, gives you complete panelboard coverage from 15 ampere, 1-pole up to 600 ampere, 3-pole at 600 volts. Hard to beat, isn't it?

Sincerely,

SQUARE D COMPANY

Bill

W. J. Moriarty
Distributor Relations Specialist

WJM:mbw

ELECTRICAL WHOLESALING

THE NATIONAL MAGAZINE OF ELECTRICAL WHOLESALE DISTRIBUTION

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ELECTRICAL WHOLESALING
(with Wholesaler's Salesman)

FEBRUARY 1957 VOL. 38, NO. 2

Published monthly by McGraw-Hill Publishing Company, Inc., James H. McGraw (1860-1948), Founder. Executive, Editorial and Advertising Offices: McGraw-Hill Building, 330 West 42nd St., New York 36, N. Y.

Publication Office, 1309 Noble Street, Philadelphia 23, Pa. Donald C. McGraw, President; Joseph A. Gerardi, Executive Vice President and Treasurer; John J. Cooke, Secretary; Nelson Bond, Executive Vice President, Publications Division; Ralph B. Smith, Vice President and Editorial Director; Joseph H. Allen, Vice President and Director of Advertising Sales; A. R. Venezian, Vice President and Circulation Coordinator.

SUBSCRIPTIONS: Address correspondence to Electrical Wholesaling — Subscription Service, 330 West 42nd St., New York 36, N. Y. Allow at least ten days for change of address.

Subscriptions are solicited only from persons engaged in wholesale distribution of electrical equipment, supplies and appliances. Position and company connection must be indicated on subscription orders.

Single copies, 35c.; 70c. a copy for special issues. Subscription rate — United States and possessions and Canada — $3.00 for one year; $4.00 for two years; $5.00 for three years. Other Western Hemisphere and Philippines—$10.00 for one year; $16.00 for two years; $20.00 for three years. All other countries—$15.00 for one year; $25.00 for two years; $30.00 for three years. Entered as second class matter May 3, 1951 at the Post Office at Philadelphia, Pennsylvania, under the act of March 3, 1879. Cable address: "McGraw-Hill New York." Printed in U. S. A. ©Copyright 1957 by McGraw-Hill Publishing Co., Inc. All rights reserved.

FEBRUARY, 1957

Print Order This Issue: 12,964

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That's what it means for Benfield Electric's hot salesman, Tony McHugh.

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NEXT MONTH: 8 Steps to Residential Lighting Success

Member ABC and ABP

midwest

A Midwest quality fitting. "Quality" is just a condensed way of saying: "Getting the total job done — right — with the most inexpensive combination of material and man hours." Engineering and producing quality fittings to meet the highest standards of electrical wiring installations, is our objective at Midwest.

Midwest Electric Mfg. Company

MANUFACTURERS OF ELECTRICAL WIRING PRODUCTS

1639 W. WALNUT STREET

Chicago 12, Illinois

Fitting Holder

Ideal-Simplet Fittings, Inc., Sycamore, Ill.

"Hub-Lugs" are said to provide a quick and easy method of fastening company's conduit fittings in electrical control and operating systems on machinery. They eliminate need for drilling holes in backs of fittings, thus assuring rigid, moisture-proof mounting of fittings. They can also be used with maker's rectangular fittings in place of fittings with welded-on lugs for other wiring work.

Grounding Receptacles

Harvey Hubbell, Inc., Bridgeport, Conn.

Manufacturer has designed a line of shallow, compact, flush mounted single grounding receptacles for grounding exposed metal parts of portable electrical equipment. The small, round, "shoulderless" body design permits mounting in restricted spaces. Two types—125-v (parallel slot) and 250-v (tandem slot)—are identical in size, take up no more panel space than their face dimension.

Connectors

Burndy Corp., Norwalk, Conn.

To assure more dependable aluminum tap connections, manufacturer has introduced Stripsealed Eltaps, L-type compression connectors having both run and tap elements factory filled with Penetrox A corrosion-preventing joint compound. Special plastic dip seals in joint compound on connector contact surfaces. When ready to install, pulling color-coded rip tape strips off the seal and compound is applied automatically. Stripsealed Eltaps are available for run conductors from #6 to #2 and taps from #10 to #2. Also for use with copper.

Relay

The Arrow-Hart & Hegeman Electric Co., Hartford, Conn.

New 20-amp magnetic relay can be used with 80 per cent of all residential central air conditioning units, will require no service after installation and will last the life of the unit on which it is installed, according to the manufacturer.

Cable Connector

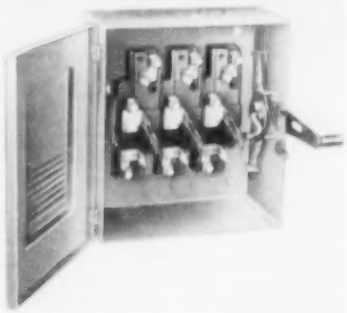
Unimatic Corp., Caldwell, N. J.

A new ⅜-in straight connector for attaching armored cable to standard knockout boxes—using only a screwdriver—has been added to Harbot connector line. Connectors feature a cam-wedge action which results from tightening the two machine screws that fasten connector to the cable. This assures a rigid, tight fit and utmost resistance to vibration, it is stated. Harbot connectors, die-cast of special aluminum alloy, are available in 45 and 90 deg models for a wide range of applications. They carry approval of UL and Canadian Standards Assn.

Connectors

Holub Industries, Inc., Sycamore, Ill.

Manufacturer's Bakelite "screw-on" type wire connectors now are UL approved for 600-v general use (1,000-v when enclosed in fixtures). Available in construction wiring sizes Hi-4 and Hi-6, these connectors are listed for general use in all types of branch circuit wiring.



Safety Switches

Federal Pacific Electric Co., Newark, N. J.

An entirely new line of industrial double throw safety switches for 240-600-v ac or 250-v dc service has been announced. Engineered features include quick make-break mechanism; silver plated current-carrying parts; visible dual blade construction; individual porcelain block assemblies; and a minimum number of joints per pole. Two- and three-pole units are supplied as fusible or non-fusible equipment in NEMA #1 enclosures.

Adjustable Lights

The Fostoria Pressed Steel Corp., Fostoria, Ohio

Two new models of fluorescent Localites have been added to manufacturer's line. Model 8-F28M-705 has a pedestal base for bench, table or desk mounting—provides instantly adjustable lighting of assembly, inspection, laboratory operations, etc. Model 55-F28M-701 has universal base for mounting on machine tools and equipment to light precision work areas. Both models are equipped with frictional disc and collar joints for flexibility.

Fixture

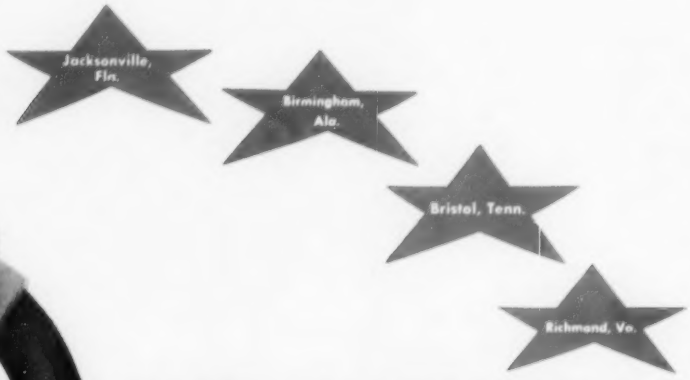
Gibson Mfg. Co., Atlanta, Ga.

Shallow, surface-mounted fluorescent fixture, designated Ceilo-35, has no dark areas concealing ballasts but provides a smooth, unbroken panel of light, according to the manufacturer. Ballasts are mounted in sides rather than in middle of the fixture. Reflectors are designed to provide extremely even distribution of light over entire diffusing area. Simplified installation, either single fixture or continuous-row mounting, is stressed. Plastic egg-crate louver has fingertip latches for easy relamping. Ceilo-35 is only 2¾-in deep, made in two- and four-light models.

Fixture Hanger

The Edwin F. Guth Co., St. Louis, Mo.

Just a twist of the stem of the new Micro-Hanger positively aligns and levels fluorescent fixtures in continuous rows or individual unit installations, maker states. Micro-Hanger features vertical adjustment—up or down—up to 1-in. Curved canopy and extra slim ½-in hanger stem complement all fixture designs. Available in six different lengths. Installation features eliminate on-the-job problems.



THE "GENERAL" ADDS TEN NEW STARS

Backing up our Authorized Distributors' stocks, General Cable now adds 10 New Distributing Centers to its nationwide operation. Now, to keep pace with soaring demands, there will be 40 General Cable Distributing Centers fully stocked to meet our Authorized Distributors' wire and cable requirements.

Rely on General Cable's Authorized Distributor stocks for superior quality, unequalled service and availability for all your wire and cable needs.

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420 Lexington Avenue, New York 17, New York
Offices and Distribution Centers Coast-to-Coast.

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Minneapolis, Minnesota
Newark, New Jersey
New Haven, Connecticut
New Orleans, Louisiana
Philadelphia, Pennsylvania
Pittsburgh, Pennsylvania
Portland, Oregon
St. Louis, Missouri
San Francisco, California
Seattle, Washington
Springfield, Illinois
Syracuse, New York
Tampa, Florida

for quality and service... **specify GENERAL CABLE**

Fixture

Lightolier, Inc., Jersey City, N. J.

Unusual recessed dome architectural lighting fixture combines accent downlight and diffused indirect light. This new incandescent unit is called Quadrilite, since its star-shaped centerpiece divides the 33-in round (or two-foot square) dome into quadrants. Unit uses a 200- or 300-w bulb horizontally positioned within the star, and easily replaced. Round dome fits plaster and dry type ceilings; square will fit suspended acoustical ceilings as well.

Low Wattage Source

Stocker & Yale, Inc., Marblehead, Mass.

Eight-watt strip has many residential and commercial applications—under cabinets, for counter and shelf lighting, illuminated signs, mirror and closet lighting—intended to save time and money and prevent accidents. Complete with side starter, assembled sockets, and knockouts for end-to-end mounting.

High Voltage Starter

The Electric Controller & Mfg. Co., div. of Square D Co., Cleveland, O.

New high voltage starter, Type ZHA (2,200-4,800-v) may be mounted directly against wall or in double rows, back-to-back, since it is completely accessible from the front. It is also surprisingly compact, according to the manufacturer—only 30-in deep—an important feature where floor space is a factor. New starter is self-contained, complete with control transformer, and furnished in three interrupting ratings for various motors.

Time Switch

Tork Time Controls, Inc., Mt. Vernon, N. Y.

Redesigned and improved three-pole time switch (Model 1963) is said to answer current demand for controlling three-phase power and lighting loads. Most popular application for the Model 1963 is the switching of three separate 120-v circuits leading from a sub-panel. This is the first such switch that can be used to control a 1½-hp three-phase motor directly, data states. Also controls electric heater loads up to full rated capacity.

Ventilator

The Peerless Electric Co., Fan & Blower div., Warren, Ohio

A new centrifugal roof ventilator recently marketed is said to offer engineers, architects and contractors a sturdy unit with modern contours, high performance rating and low noise level. It is well suited for schools, churches, auditoriums, hospitals where ow noise levels must be maintained. Also available with larger, heavier motor for commercial and industrial applications. Ventilator units have PFMA certified ratings. Knockouts are provided for internal wiring. Units are weathertight throughout. Bird screens are standard equipment.

Service Entrance

General Electric Co., Circuit Protective Devices dept., Plainville, Conn.

A new 70-amp all-in-one meter socket-load center combination has been introduced. Design of this device (and others in expanded line) provides extra installation and servicing convenience in many cases. Utilizing a wired-in two-pole, common-trip, 70-amp Type TQL main circuit breaker, the new load center permits savings to contractors when more than 50-amp but less than 100-amp service is needed. Device eliminates need for a separate main disconnect; has space for 14 single-pole branch circuits.

Door Chimes

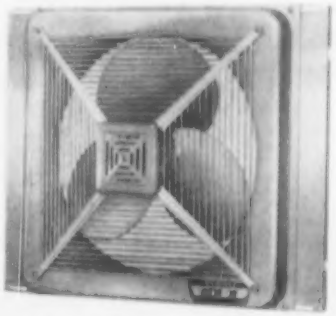
Edwards Co., Inc. Norwalk, Conn.

New line of door chimes features compact modern styling and satin finish natural wood cases. These chimes provide one note, two note and continuous signals, with full utilization of the chime provided by manufacturer's exclusive Vibrechord movement. Each chime is offered in a transparent window package which permits customer inspection at point of sale.

Window Fans

Signal Electric div., King-Seeley Corp., Menominee, Mich.

New low priced window exhaust fan, Model EP-20, is rated at 3,950-cfm with three-speed control. Window panels expand from 26⅞-in to 33-in to fit sash-type windows. The EP-20 has three-tone color styling: neutral gray-blue expander panels, contrasting darker blue control panel, gray finger-proof grille and blades. A companion model, the RP-20, is similar and is electrically reversible. Both carry full five year guarantee.



Window Fan

Berns Air King Corp., Chicago, Ill.

"Square" styling and "appliance type" push-button controls are design features of an electrically reversible 20-in window fan now available. Manufacturer states that the SQ20PB—which has three speeds and delivers 4,000 cfm (circulating) on high speed—is offered to provide brand name quality and styling at a price competitive with off-brand merchandise.

Electric Heaters

Electrend Products Corp., St. Joseph, Mich.

A full line of Ray-Vec wall-type electric heaters has been engineered to supply instant heat at low cost for baths, kitchens, etc., according to the manufacturer. Heating element is Nichrome resistance wire mounted in heavy-duty rust-resistant frame. The high-gloss chrome reflector provides both radiation and convection heat; low wattage assures economical operation, it is stated. Both manual and thermostat controlled models are made.

Service Equipment

Federal Pacific Electric Co., Newark, N. J.

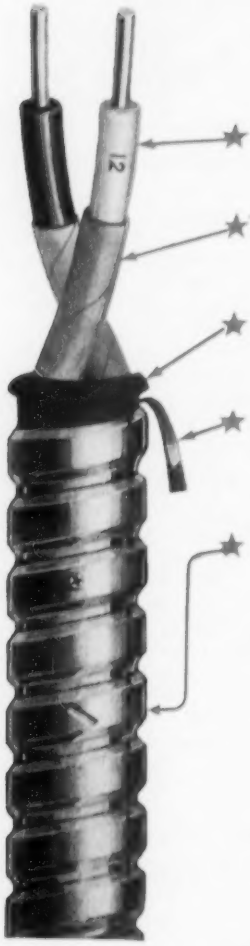
New fusible service equipment unit is designed to provide adequate protection for 240-v home appliances and branch circuits. The 100-amp main disconnect controls two 60-amp, 240-v pullouts; two 30-amp, 240-v pullouts; and 10 plug fuse branch circuits. Design simplifies installation by eliminating need for auxiliary main disconnect. Non-interchangeable branch pullouts prevent overfusing; reversible puller heads indicate "on" or "off" position; split solid neutral saves installation time and reduces cost. Available in flush or surface enclosure.

CRESCENT

ABC ARMORED CABLE, TYPE ACT

With Improved Features

EASIER • QUICKER • SAFER



PLASTIC INSULATED CONDUCTORS are clean, easy stripping, with solid, clear colors, and minimum diameter for easier installation in boxes.

PAPER TAPE which is tough, moisture-resistant yet easily removed, gives protection to the insulated conductors.

INSULATED BUSHING for protection against sharp ends of armor; furnished with each coil of cable.

BOND STRIP UNDER ARMOR is used in all sizes. A flattened aluminum bonding wire in contact with the underside of each convolution of the galvanized steel armor assures a permanent, low resistance through armor to ground.

PREFABRICATED BREAKING LINES. At intervals of every 1½ inches on CRESCENT ABC Armored Cable will find a small cut mark. This cut mark shows the location of prefabricated breaking line inside the armor.

Only a few short strokes of a hacksaw guided by the cut mark are required to cut through ONE outer ridge, and a bend by hand severs the armor. By actual test, this saves 30% of the time ordinarily required. A clean separation results, with no sharp edge. There is no chance of injury to insulation because only one OUTER ridge is cut.

The prefabricated breaking lines in the armor are so made that THERE IS NO REDUCTION of tensile strength, bending qualities, crushing resistance or electrical conductivity. This armor construction meets all requirements of Underwriters' Laboratories.

CRESCENT WIRE & CABLE

OVER 70 YEARS EXPERIENCE

CRESCENT INSULATED WIRE & CABLE CO.

Trenton, New Jersey

TOP OF THE NEWS . . . and its significance to you

Electrical Wonders in Washington

The world's largest light bulb (a 75,000 watter), a solar battery, a scale model of an atomic generating plant, luminescent lighting panels, and a 10-foot model of the Nautilus—**these are some of the feature attractions** being exhibited at the Electrical Exposition in Washington, D. C. February 12-14. Some 150 exhibits will be staged by manufacturers, plus the Department of Defense. Details of the event are on page 116.

Housewares at the Crossroads

NAED's electric housewares committee is continuing its two-pronged drive: to arouse the NAED membership to the **potential of an all-out effort to merchandise electric housewares;** to impress manufacturers with the value of the electrical wholesaler in the housewares distribution picture. NAED Executive Director Arthur W. Hooper told manufacturers and distributors last month that wholesalers should provide "full service" in this field, **but must find it profitable** or be forced to become brokers. Neither can afford to have that happen. A report on the electric housewares meeting appears on page 127.

Shortage in Sight

To mention a few primary commodities which won't make "shortage" headlines during 1957: copper, steel, aluminum. But, WANTED signs will be hung up for such basic necessities of productivity as specialists to operate electronic "brains" and wholesaler salesmen with engineering know-how (see story on page 66).

N.Y.C. Gets New Code

New York City has a new electrical code, "designed to bring wiring requirements abreast of modern needs," according to the City Council. The new code applies to new and remodeled buildings only—**will add about 30 per cent to the wiring cost of new structures.** Increased feeder capacity requirements apply to all types of buildings from auditoriums to warehouses. But it is the **residential dwelling field** that has chiefly prompted the action. In explaining the need for the new code, city officials cited the "relentless trend to add an ever-increasing number of current-consuming appliances to existing circuits" and public awareness of the "desirability of much higher levels of illumination than were once thought sufficient." The new code resulted from three-years of study by representatives of the electrical industry, electrical unions, and business and civic associations.

Further Notes on Fair Trade

Fair Trade has a much broader aim than eliminating discount selling. The chief topic at last month's meeting of the American Fair Trade Council was the problem of protecting manufacturers' trade-mark rights from deceptive representations by predatory resellers. The council cited the growth of both production and distribution in the 20 years since the Miller-Tydings Act and added: "It is doubted that our legislators or our courts will permit our economy to degenerate to a jungle level, with **sharpshooting resellers pressuring prices until quality is squeezed to shoddy levels** with the consumer's dime buying less and less of real value."

New Discount Set-up

A revised distributor discount policy described as "encouraging a halt to an increasing trend by electrical wholesalers toward brokerage type operations" will be put into effect March 31 by the Circuit Protective Devices dept. of the General Electric Co. "The new policy will **compensate more equitably those distributors who are fulfilling their traditional warehousing functions,"** the department's marketing manager, Robert C. Hanna, stated, since it allows distributors an appreciable discount advantage on orders shipped to stock. He described the problem facing his department as one which encompassed virtually the whole electrical industry. When a distributor surrenders his stocking function, Mr. Hanna concluded, "it seems to me he also ought to **surrender the privilege of enjoying the same discount rates** available to stocking distributors."

"Sheep's Eyes"

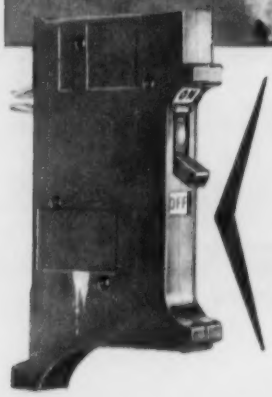
The united labor movement has expressed an invigorated intention of organizing the white-collar workers of the country—claiming now to know what obstacles are involved and to have the resources to overcome them. "We may not make the spectacular advances . . . as marked the breakthrough into mass-production industry, a chief labor organizer stated, **"but we are on the move."**

NOW...*offer your customers* OVER-THE-COUNTER

FEDERAL PACIFIC

Now, provide "over-the-counter" panelboard service...cash in on a new source of business... build more store traffic with STABREAKER, the world's first "plug-in" type AB circuit breaker! With this new product line, you're in position to offer a new kind of service—and at the same time share in a profitable new business. You actually become the panelboard center of your area supplying lighting and power panelboards instantly...directly from stock. What's more, *with the same inventory* and just two extra enclosures, you're in position to fill all NEMA-1A AB-I orders through 225 amperes! And by offering this service—you stand a better chance of getting orders for conduit, cable and other accessories. For full information, contact your Federal Pacific salesman or write Federal Pacific Electric Co.

FPE
FEDERAL PACIFIC ELECTRIC



REVOLUTIONARY NEW BREAKER SLASHES SPACE AND COSTS!

It's a big 2 for 1 story for panelboard lighting circuits... the new single-pole "NE-S" frame STABREAKER! Gives twice the number of lighting circuits in the same space occupied by conventional single pole breakers. Only 1 1/16" wide! Half the former width...considerably less than the former cost...without sacrifice of AB circuit breaker quality.

Finest Products Engineered

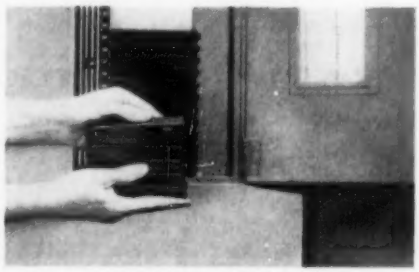
PANELBOARD SERVICE *with*

STABREAKER

HOW STABREAKER "OVER-THE-COUNTER" PANELBOARD SERVICE SAVES YOUR CUSTOMERS TIME AND MONEY

1. Four different size panel assemblies are available (single and double bussing) to accommodate "NE-S", "NF-S", "NJ-S" frame STABREAKERS. Main capacities are up to 600 amps. The branch circuits required determine the size panel assembly you need.

2. Then "plug-in" the combination of ratings and frame sizes of STABREAKERS required. All standard ampere ratings through 225 amperes available.



3. When space for spare branches is needed, complete dead front is secured by means of filler plates included with each panel assembly. Merely break off required section of filler strip and slide into place. Trim holds breakers and filler strip firmly.

4. Fasten trim in place with self-indicating trim clamps and the STABREAKER Panelboard installation is complete.

STABREAKERS for AB-I Enclosures, too!

The same plug-in STABREAKERS used in STABREAKER Panelboards can be used for individually enclosed circuit breakers, too. With STABREAKER you simply "plug-in" all ratings from 15 through 225 amperes in only two NEMA-1A StAB-Inclosures. Results: unmatched flexibility and convenience...simple interchange of ratings...visible disconnect...simplified installation...simplified inventory.

FEDERAL PACIFIC ELECTRIC COMPANY

Main Office: 50 Paris Street, Newark, N. J.

FPE
FEDERAL PACIFIC ELECTRIC

BIG SPRING PUSH ON APPLIANCES

Life, Look, The Saturday Evening Post, Ladies' Home Journal and 7 other top national magazines will sell millions of readers on all brands of appliances with these new full-page, full-color Live Better Electrically "Rate Your Kitchen" advertisements.

Powerful Live Better Electrically "Rate Your Kitchen" Campaign Focuses on Retail Sales

Electrical dealers and distributors will benefit from a big Spring Push this year – a great new "Live Better Electrically" advertising and promotion campaign, specially geared to develop sales of electric appliances and household equipment.

NATIONWIDE COVERAGE

Nationally this campaign will be spearheaded by full-page, full-color advertisements in 11 consumer magazines, including Life, The Saturday Evening Post, Look, and Ladies' Home Journal. These advertisements feature an entirely new approach to the problem of creating a demand for electric appliances – an invitation to readers to "rate" their kitchens on the "electrical living scale." The ads highlight a check list of thirty electrical items, and consumers will "rate" their kitchens according to the number they own.

TV WILL SELL APPLIANCES, TOO

Once a month on Sunday nights over the full CBS-TV network, screen star Ronald Reagan will take 38,000,000 viewers through his new all-electric home in California. Each of these three-minute trips will stress the benefits of having more electric "servants" in the home. Electric kitchen appliances, lighting, HOUSEPOWER, television, hi-fi and heating and cooling are some of the special features.

STRONG LOCAL CAMPAIGNS

Besides the great national effort to build demand for electrical living, local promotions under the leadership of electric utilities will carry the "Live Better Electrically" story to millions of prospects via newspapers, radio and TV, special supplements, car cards, billboards and exhibits—all designed to build sales of all brands of appliances for dealers and distributors who tie in.

New Promotion Tools to Boost Sales of All Brands

An unusually complete and effective array of special promotion materials will hypo sales of all brands of appliances for dealers and distributors who tie in with "Live Better Electrically's" nationwide program.

Dealers can get the benefit of "Live Better Electrically's" national campaigns in their own newspaper advertising with ad mats, glossy photos and special supplements. Catchy TV spots, radio recordings and scripts cover a wide range of appliances. There are "Live Better Electrically" banners, posters, streamers, bumper stickers and decals for windows and sales areas, for trucks and cars. And the "Live Better Electrically" symbol becomes a first-rate salesman on price tags, counter, floor and window displays and stationery.

"Live Better Electrically" has made up a special promotion kit geared for dealers and distributors. It includes a complete ad-mat service, handout literature, point-of-sale displays, posters, a giant full-color blowup of the "Rate Your Kitchen" ad, and a handy, informative guide on how to use these selling tools. To find out how you can tie in with this "ready-made" program in time for the big Spring Push on appliances, see your local utility or distributor.

Yes! "Live Better Electrically" Works!

Across the nation, dealers report that tying in with "Live Better Electrically" pays off in extra sales. A typical dealer in Commonwealth Edison Company's territory, Carl Hope of Suburban Electric Co., Homewood, Illinois, increased his October-November dryer sales from 14 to 65 units by tying in with the utility's "Live Better Electrically" campaign.

In *San Diego* a special "Live Better Electrically" home-freezer promotion was sponsored jointly by San Diego Gas & Electric Co., a leading food chain, and appliance dealers. This cooperative effort resulted in a *57% increase* in freezer sales during the six weeks of the campaign.

In *Virginia*, 1,250 dealers cooperated with Appalachian Electric Power Co. in a "Live Better Electrically" campaign that increased 1956 appliance sales 21%.

285 dealers in Philadelphia joined with Philadelphia Electric Company and the Electrical Association to promote a "Live Better Electrically" consumer contest. Outstanding sales resulted. Pictured is one of many dealer showrooms decked out with "Live Better Electrically" banners, display cards, contest material and appliance tags.

LIVE BETTER...*Electrically*

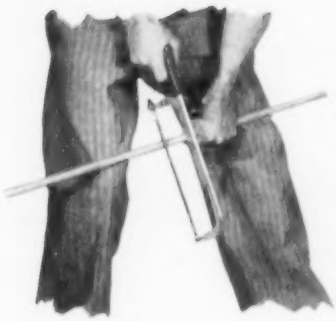
A united effort by everyone in the electrical industry—utilities, manufacturers, distributors and dealers—to increase consumer sales of electrical merchandise.

LIVE BETTER ELECTRICALLY

Sell Republic E. M. T. because

THE BEST COSTS LESS INSTALLED

You can show why when you...



SELL

EXCLUSIVE "INCH-MARKS"

They make quick measurement a cinch. In the popular sizes, every length of Republic ELECTRUNITE® E.M.T. is like a 10-foot rule—marked off from end to end in *feet* and *inches*. Helps avoid the clumsy problem of a flat rule on a round tube . . . eliminates guesswork.

SELL

EXCLUSIVE "GUIDE-LINE"

It extends full length of tubing. By properly aligning with calibrations on Republic Bender, bends are kept in the correct plane, thus avoiding costly "wows". Both "INCH-MARKED"® and "GUIDE-LINED" features come in ½", ¾", 1" and 1¼" sizes.

SELL

EXCLUSIVE "INSIDE-KNURLING"

It reduces friction, thanks to inside ball-bearing surface—makes wire-pulling as much as 30% easier. ELECTRUNITE E.M.T. is made to Underwriters' Laboratories Standards—is approved by the National Electrical Code for concealed, open and concrete construction.

SELL

UNIFORM DUCTILITY

Every foot of Republic ELECTRUNITE E.M.T. has it to assure smooth, accurate bends *every time*—with no costly kinks. Welded by the famous Electrunite Process, this quality conduit is 100% Republic—from ore to finished product.

SELL

UNIFORM CONCENTRICITY

It provides a truly round tube for snug-fitting connections that completely shut out moisture and concrete—protect against fire. Easy-to-use compression fittings that make sturdy, watertight joints are available in a complete range of types and sizes.

COMPLETE INFORMATION

is found in colorful sales aids and ad reprints. They're yours for the asking—will be imprinted *free* at your request. They'll make your salesmen's job easier, mean more profits for you. Write us or call your Republic representative today.

NATIONAL ELECTRICAL Week

REPUBLIC STEEL

STEEL AND TUBES DIVISION

215 EAST 131ST STREET • CLEVELAND 8, OHIO

REPUBLIC STEEL

New money-makers . . .

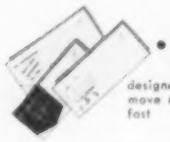
from IDEAL SIMPLET

Two *new* items . . . designed and developed by Ideal-Simplet . . . to help your contractor customers and prospects do a quicker, better job. Hub-Lugs (patent applied for) speed installations wherever fittings must be securely mounted for maximum, trouble-free performance. Duplex Outdoor Covers provide permanent protection for outdoor convenience outlets, regardless of weather conditions.

Get the facts NOW . . . These sure-fire, extra money-makers can add substantial *plus business* to your volume!

Supported By "All-Out" Promotion To YOUR CUSTOMERS . . . Through . . .

- **NATIONAL ADVERTISING . . .** in leading contractor and machinery magazines



- **DIRECT MAIL . . .** designed to help you move merchandise fast

- LITERATURE
- SAMPLE DISPLAYS
- NEW CATALOG
- AND FIELD SALES HELP

WRITE FOR DETAILS ON HOW YOU CAN CASH IN ON THESE MONEY-MAKERS RIGHT NOW

Pioneers in Conduit Fittings and Electrical Specialties

IDEAL **SIMPLET FITTINGS, Inc.**
A Subsidiary of Ideal Industries, Inc.
1047-B PARK AVENUE • SYCAMORE, ILLINOIS

Raintight Clampmatic Vacu-Break—a fusible or nonfusible switch completely weather-proof. Ratings from 30 to 200 amps.

Junior Clampmatic Vacu-Break—a high-quality, fusible, general-purpose switch. Ratings range from 30 to 600 amps.

◀ **Master Clampmatic Vacu-Break**—unequaled for quality, dependability and performance. A fusible or nonfusible heavy-duty disconnect for applications up to 1200 amps.

Profit from these 3 Clampmatic Vacu-Break safety firsts!

Three exclusive safety *firsts* are the mark of *all* BullDog switches. They assure top performance . . . bring *extra* protection and longer life . . . bring *you* rapid turnover, more profits.

Vacu-Break® arc control, for one, smothers arcs instantly . . . minimizes burning and pitting. Unique Clampmatic® action provides *bolt-tight* contact pressure. And the dependable BullDog switch mechanism guarantees positive switching.

In every way—for *any* switch application, one of BullDog's big 3 safety switches will meet virtually any customer requirement. For complete details see your BullDog field engineer or write us direct.

© BEPCO

BullDog Electric Products Company, Detroit 32, Michigan • A Division of I-T-E Circuit Breaker Company • *Export Division:* 13 East 40th St., New York 16, N.Y. *In Canada:* BullDog Electric Products Co. (Canada), Limited, 80 Clayson Rd., Toronto 15, Ontario.

IF IT'S NEW . . . IF IT'S DIFFERENT . . . IF IT'S BETTER . . . IT'S

BULLDOG

ELECTRIC PRODUCTS COMPANY

Mr. Maginniss inspects a Tiger Brand pigtail coming from end of a vibrator tool.

"We've never had a complaint about Tiger Brand Amerclad!"

says H. J. Maginniss, President
Maginniss Power Tool Company, Mansfield, Ohio

Here's a success story for you. In 1947, Mr. Maginniss started his company with one employee—himself. One year later, he added one more employee. Today, he has 35, and business is booming. His only product is an electric generator-vibrator system that knocks the entrapped air out of freshly poured concrete so that it is denser and stronger.

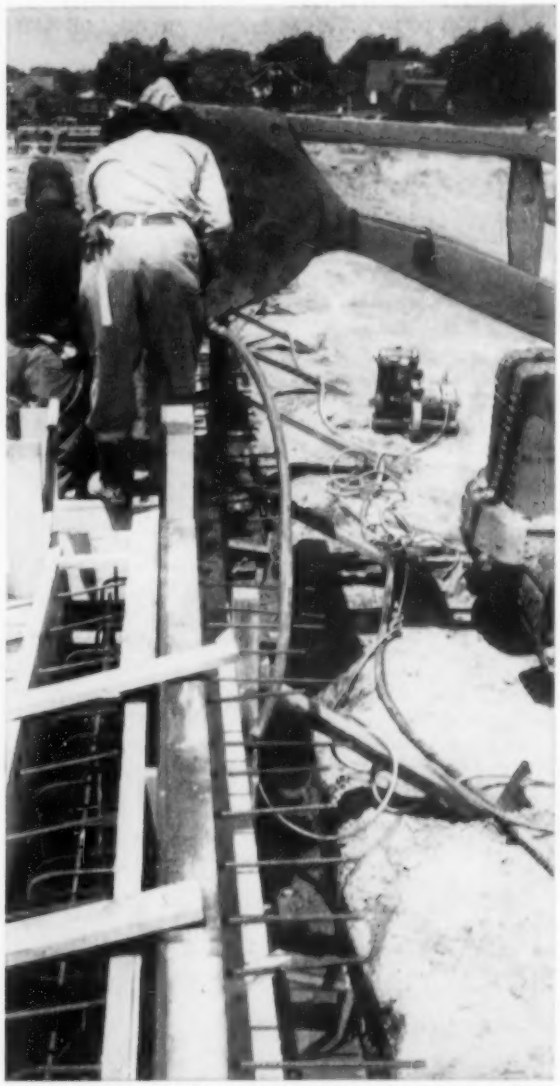
Early in the game, Mr. Maginniss learned that construction men did not exactly baby his tools. As a result, everything is built as ruggedly as possible, and that includes the cable, which is four-conductor, No. 12 AWG Tiger Brand Amerclad. Sometimes the cable drapes over several stories of scaffolding and is dragged over rough concrete, wooden beams and steel piling—while heavy trucks roll over it down on the ground. Despite all this, they have never had a complaint about the cable.

Do *you* need this kind of quality? Your AS&W salesman will give it to you!

Harry Bunton paints a vibrator. Notice heavy casing around cable near the hand hold.

Here is a cable casing that was damaged in use. Cable inside was not injured.

Workman ready to drop tool into concrete. Electric generator is on ground.



See the snarl of cable between tool and generator. Tiger Brand is made for this treatment.

AMERICAN STEEL & WIRE DIVISION, UNITED STATES STEEL, GENERAL OFFICES: CLEVELAND, OHIO

COLUMBIA-GENEVA STEEL DIVISION, SAN FRANCISCO, PACIFIC COAST DISTRIBUTORS • TENNESSEE COAL & IRON DIVISION, FAIRFIELD, ALA., SOUTHERN DISTRIBUTORS
UNITED STATES STEEL EXPORT COMPANY, NEW YORK

USS TIGER BRAND ELECTRICAL WIRE & CABLE

A STANDARD TIGER BRAND CABLE FOR EVERY SPECIAL JOB

- asbestos wire and cable
- mold cured portable cord
- shovel & dredge cable
- paper & lead cable
- varnished cambric cable
- interlocked armor cable
- special purpose wire & cable
- aerial, underground and submarine cable

UNITED STATES STEEL

steer steady lamp profits your way!

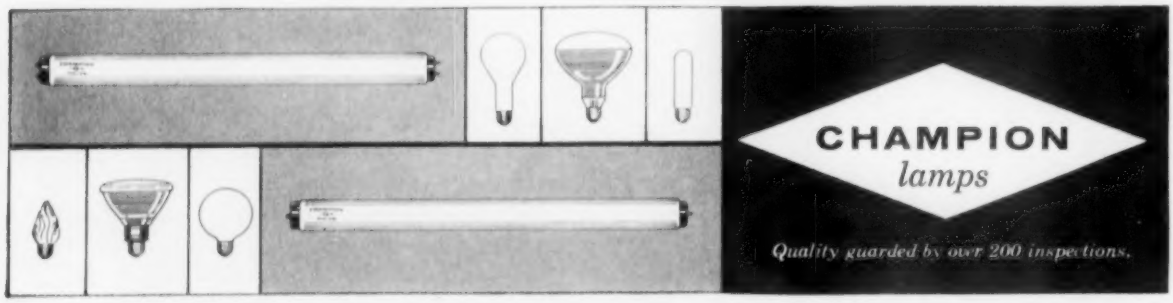
Lots of good lamp business will fly right on by if you carry a line of lamps everyone else carries, too.

Steer some of these steady profits *your way* by selling Champion Lamps — a line that's limited to selected suppliers like yourself.

You get the repeat business — not just any competitive salesman who happens along. You *keep it*, too, for Champions have a 50-year reputation for lasting lighting value.

sell **CHAMPION** *lamps*

CHAMPION LAMP WORKS
LYNN, MASSACHUSETTS
DIVISION OF CONSOLIDATED ELECTRIC LAMP COMPANY



☆ ☆ ☆

Machine designers say these new heavy duty pushbutton units have no equal and prove it by adopting them as standard equipment

These are the world's smallest heavy duty pushbuttons. They require a behind-the-panel depth of only 1 3/32". This is 40% less space than needed by the next smallest units on the market. Double-pole contact blocks are available in all combinations of normally open and normally closed contacts. Each control circuit is electrically and mechanically isolated from the other. Each circuit is clearly identified and all terminals are color coded. Rapid on-the-job circuit additions are obtained by stacking contact block on contact block.

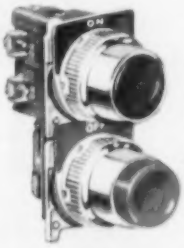
☆ *they install easier*

☆ *they work better*

☆ *they last longer*

Design engineers are quick to recognize that these new heavy duty pushbuttons have *everything*. There is nothing on the market like them. They are amazingly compact to require the least back-of-panel depth. They are one-hole mounting and they are oil tight. They easily provide for as many as eight separate control circuits per pushbutton, eight completely isolated heavy duty contacts either normally open or normally closed. The buttons may be flush type, the extended type or with mushroom heads. They can be black, red, yellow, green or gray. See the new one-button control station, C-H Roto-Push. See the easiest-to-install maintained-contact pushbutton attachment and the means for padlocking any of the standard pushbuttons. There are both knob and key operated selector switches in this complete line. Also matching indicating lights and the new automation safety light, PresTest. Be sure you have complete information *now*. Write today on your company letterhead for a copy of the new Cutler-Hammer Pushbutton Handbook Pub. EL-178. CUTLER-HAMMER, Inc., 1327 St. Paul Ave., Milwaukee 1, Wisconsin.

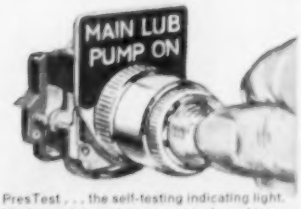
These pushbuttons may be flush type, extended type or with mushroom heads . . . in a wide range of colors for quick control identification. Standard, large, and jumbo size legend plates fit every type of operator and indicating light in the entire line.



A maintained-contact pushbutton assembly that saves more than its entire cost by installation savings. New attachment with its pushbuttons mount in minutes; no fussy adjustments. Neither alignment nor spacing of units is critical. Pushbuttons will not bind or stick; always operate perfectly.

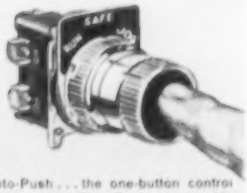
CUTLER-HAMMER
☆ ☆ ☆
MOTOR CONTROL
C-H

The C-H one-hole mounting oil-tight indicating lights with new wide-visibility lenses are the most visible from all angles by actual light meter tests. Available in either transformer or resistor types. Lenses offered in six different colors.



PresTest . . . the self-testing indicating light. Vital to safety and proper use of machines, particularly in automation. PresTest now permits instant proof light is NOT off because of burned-out bulb. Merely pressing on the light lens disconnects bulb from its normal circuit and checks it on a test power supply. Resistor and transformer types available.

The most complete line of oil-tight selector switches on the market. Key or knob operated; two or three position. Positions may maintain contact or have spring return. Three standard contact blocks provide a wide range of circuit combinations with the use of just a single block. Unlimited circuitry by adding blocks.



Roto-Push . . . the one-button control station. One Roto-Push can provide all the control functions for which two or three separate pushbuttons would be used normally. Available in a wide range of selector and button operators. Roto-Push simplifies panel design and saves installation time to cut costs. Improves machine-operator efficiency.

Your customers read this ad

Here's just one of the Rome ads supporting your own sales effort. It's one of many to appear in important electrical magazines.

When you stock Rome FlexAll, you get a cable that you can recommend for branch circuit use almost anywhere. It's ideal for the underground wiring of outdoor lighting jobs, for example. This is just the cable your contractor customers need as they increase their business—and your sales—by selling more and bigger outdoor lighting installations. And it's ideal for locations where moist and corrosive atmospheres prevail: for food processing plants, dairies, breweries, packing houses, cold storage and ice plants, etc.

Besides providing users with the many advantages described above, Rome FlexAll offers *you* these important benefits:

- **Smaller inventory**—this one cable can do the job of many others.
- **Easy storage**—packaged in cartons for neat, compact storage.
- **National advertising support**—Rome Cable assists your selling effort by regular advertising in national trade magazines and other publications.

Single-conductor FlexAll is available in sizes 4 AWG through 14 AWG. Two- and three-conductor types come in sizes 10 AWG to 14 AWG.

Boost your sales of multi-purpose cable by stocking up with Rome FlexAll. Contact your nearest Rome Cable representative for more information—or write to Department 345, Rome Cable Corporation, Rome, New York.

ROME CABLE
CORPORATION

WIND UP WIRING JOBS FAST
... WITH WEAVER
"DUAL-GRIP" ENTRANCE HEADS
Built-in connector clamp. Just tighten two screws on EMT or rigid conduit. No threads or fittings needed—saves time!
GROUND RODS AND CLAMPS
The rods: Copper armor uniformly thick from tip to tip. Steel core and sharpened point for easy driving. Clamps are designed to go with the rods.
ENTRANCE ELBOWS
WEAVER
Compact—easy to handle. Deep cut threads—weatherproof.
HEAVY DUTY CONNECTORS
For all type connections. Priced far lower than split-bolt connectors ... save up to 30% on larger sizes.
BRONZE GROUND CLAMPS
Complete line for ¼" to 4" pipe. 3 types cover all needs. Swinging top for easy installation.
J. A. WEAVER Company
2110 HOWARD ST. • ST. LOUIS 6, MO.
CEntral 1-8100

ANOTHER GREAT AMPROBE

4 ways easier to sell because it's 4 ways easier to read!

The New Amprobe RS-1

1. One-hand operation! A flick of your thumb changes the range.
2. You see only *one* scale at a time. *Four* current ranges, *two* voltage ranges.
3. New magnified dial! Longer scale length.
4. Pointer-lock "freezes" needle at reading. Needle can be locked in place and read away from conductor.

$39.85

14 models to choose from. There's an Amprobe for every job and every budget – from 10 amps and 250 volts to 1200 amps and 600 volts AC. And from $19.85 to $67.50. Make sure you cash in on the continuous hard-sell advertising for the complete line.

AMPROBE® WORLD'S LARGEST SELLING SNAP-AROUND VOLT-AMMETER

ANOTHER GREAT PROMOTION!

YOUR

"Lucky Combination"

FOR

GREATER AMPROBE VOLUME!

4 WAY PROMOTIONAL PACKAGE!

RS-1 "Lucky Combination" Sweepstakes brings the customers in! Watch them crowd *your* counter to try their luck at winning these new AMPROBE Model RS-1 testers.

This whole Sweepstakes package is yours with an introductory order for only 6 of these new AMPROBE Model RS-1 testers. Here's what you get:

1. Colorful Display with Free Amprobe and combination lock. The first customer to dial the right combination wins the RS-1!
2. 300 "Lucky Combination" Cards. 4 color picture post cards with a combination number on each to send to your customers.
3. Big Ads all about the RS-1 beamed at your customers!
4. Extra Combination Cards for your counter.

Wire collect today for your

RS-1 "LUCKY COMBINATION" PROFIT PACKAGE

PYRAMID INSTRUMENT CORPORATION, LYNBROOK, N. Y.

This General Electric advertisement can help you make more money on your next call!

Your high bay customers should be "push overs" for this story.

It's so simple, they just change lamps and get more light, less maintenance

These cover lots of your customers.

Tell the G-E reflector lamps story on your next call means more dollars for you, too — use a reprint of this ad!

LIGHT ISN'T WASTED UP HERE

Stop paying for wasted light

SWITCH TO GENERAL ELECTRIC REFLECTOR LAMPS, GET MORE LIGHT—SAVE MONEY, TOO!

TO GET MORE LIGHT ON THE JOB . . . OVERNIGHT just switch to General Electric Reflector Lamps in your filament or mercury lamp systems. It's as easy as a twist of the wrist. The reflectors are sealed *inside* the bulbs where they can never get dirty. You get up to 78% more light on the work . . . where you want it. There's a size to fit your present system; no need to buy new fixtures or sockets.

YOU SAVE MAINTENANCE DOLLARS, TOO. You seldom if ever have to clean fixtures. Maintenance is reduced to changing burnouts—and the uniform life of General Electric Lamps makes it possible to change burnouts on a regular schedule.

CHOOSE FROM THESE FILAMENT REFLECTOR LAMPS. General Electric's 500- and 750-watt filament reflector lamps are available in standard or high voltage, and 1000-watt in standard voltage. Their sealed-in, pure silver reflectors never need cleaning.

CHOOSE FROM THESE MERCURY REFLECTOR LAMPS. (1) The General Electric RW-1 with white phosphor reflector is the newest, and gives you the most light at lowest cost in most areas. Also you get better, whiter light, than from any clear lamp. (2) The RC-1 with phosphor reflector gives you extra light (only 7% less than the RW-1) *and* color improvement, too. (3) The R-1 has a pure silver reflector; is best for extremely dirty areas.

RW-1

RC-15

And if you're now using 1000-watt Mercury Lamps, try the new *half*-phosphored G-E 1000-watt Mercury Reflector Lamps (either RC-15 or RC-12). All lamps are interchangeable with comparable clear lamps.

Your General Electric Lamp specialist will be glad to help you pick the best G-E Reflector Lamp for your plant. Contact him now—or write: General Electric Co., Large Lamp Dept., Nela Park, Cleveland 12, Ohio.

Progress Is Our Most Important Product

GENERAL ELECTRIC

MORE LIGHT IS REFLECTED TO THE WORK AREA DOWN HERE

THIS AD APPEARS IN THE FEBRUARY ISSUES OF BUSINESS WEEK, FACTORY, MILL & FACTORY, IRON AGE, STEEL, PLANT ENGINEERING, ELECTRIFIED INDUSTRY, PURCHASING NEWS, FOUNDRY.

REPRINTS OF THIS AD ARE AVAILABLE

Use these on your regular calls, or maybe you'd rather mail them before you make the call. Quantities are available for your use. Get them free from your local G-E Large Lamp Dept. representative.

Progress Is Our Most Important Product

GENERAL ELECTRIC

EASY WAY

TO FINISH A JOB

MULTIMOUNT LUG

SINGLE LUG

TWIN LUG

SPLICER

Socket set screws furnished as standard. Hex head screws available on all fittings at no extra cost. L35 and L70 furnished with slotted screw to allow tightening with screwdriver.

BLACKBURN

TERMINAL LUGS AND SPLICERS

- Quickly Installed—No Special Tools Required
- Highest Quality Materials Throughout
- Rugged, Durable Construction; Compact Design
- Choice of Bolt—Screw, Socket or Hex-head
- Economically Priced

Available Through Electrical Wholesalers Everywhere
Write for Latest Lug Bulletin Containing Specifications and Prices

JASPER BLACKBURN CORPORATION

35 MADISON STREET • ST. LOUIS • MAIN 1-2821

Jefferson Ballast for 800 MA High Output Fluorescent Lamps

This Jefferson Ballast is designed to give you Full-Rated light output as specified by the lamp manufacturer.

Only Jefferson has succeeded in *designing* and *manufacturing* a ballast for two HO 96T12/RS or two HO 72T12/RS lamps capable of giving *full light* output.

Applications include medium and high bay industrial and commercial locations where high output is required.

It is recommended that surface mounted fixtures be checked for conformance to UL temperature requirements.

Remember—for full light output from the new High Output lamps, insist on Jefferson Ballast No. 254-721!

COMPLETE BALLAST SELECTION DATA

New Technical Bulletin B560-10 gives complete selection data on the entire Jefferson Ballast line in compact, easy-to-use form. Write for your copy today!

PRIMARY 118 VOLTS*—60 CYCLES—HIGH POWER FACTOR

Catalog No.	Watts	Lamps	MA	Approx. Watt Loss	Sound Group	Minimum Operating Temperature	Net Weight
254-721	(2)100/105	(2)96T12/RS	800	38	F	+50°F	13 Lbs.
	(2)85	(2)72T12/RS	800			−20°F	

Length 14 5/16", Width 3⅛", Height 2⅝", Mtg. Centers 13¾".

*For 277 Volt lines, specify Catalog No. 254-728.

Jefferson Electric Company

BELLWOOD, ILLINOIS

ROYAL ELECTRIC PACKAGING KEEPS PROFITS POPPIN'

Easier, faster handling means bigger portable cord profits for you with Royal's new corrugated "Handi-Pak" (250' spools, individually packaged) in Master cartons!

LOWER HANDLING COSTS! Now . . . you save time and trouble . . . new "Handi-Pak" Cartons speed spool handling on both receiving and shipping. Master cartons simplify your warehousing and multiple unit shipments, too!

EASIER STOCKING! New "eye-opening" carton identification makes shelf stocking faster, easier . . . promotes faster order processing, and rapid, accurate stock control.

GREATER CUSTOMER SATISFACTION! "Tuck type" tops — a Royal First for cord cartons — are easy to open and close . . . eliminate messy cutting and tearing. Here's a feature busy contractors and dealers will appreciate . . . and one by which you can profit!

ORDER ROYAL ELECTRIC PORTABLE CORDS IN NEW HANDI-PAK CARTONS NOW!

2 "Handi-Paks" (500') per Master Carton	4 "Handi-Paks" (1000') per Master Carton
Type S 18/2	Type SJ 18/2
Type S 16/2	Type SJ 18/3
Type SJ 18/4	Type SJ 16/2
Type SJ 16/3	Type SJO 18/2
Type SJ 16/4	Type SJO 18/3
Type SJO 18/4	Type SJO 16/2
Type SJO 16/3	
Type SJO 16/4	

ROYAL

ROYAL ELECTRIC CORPORATION
PAWTUCKET • RHODE ISLAND

AN IT&T ASSOCIATE

Manufacturers of **WIRE • CORD SETS • FUSES • WIRING DEVICES**

circuit breaker

PANELBOARDS

mean smaller inventories, faster turnover and increased sales and profits for wholesalers

That's because FA Circuit Breaker panelboards . . .

. . . provide the maximum in circuit protection against short circuits, momentary or severe overloads, which means more satisfied users and more repeat business.

. . . panelboards are of the panel base assembly type which means that all components are packaged for easy stocking on dealer's shelves and for quick assembly on the job.

. . . the number of units required to meet almost any job has been reduced to five sizes with main lugs and five sizes with main circuit breaker which means less shelf space and smaller inventories.

FA Circuit Breaker Panelboards are of two types — **the QP Quicklag P., and the QS Quicklag S. All are designed to provide the capacity** needed for today **and at the same time** allow for future expansion.

A feature of FA Circuit Breaker Panelboards is the Circuit Breaker's trip-free handle preventing contacts from being held in closed position against abnormal overloads and short circuits. The inverse time limit prevents the Circuit Breaker from tripping on momentary overloads. Quick make and quick break of contacts is provided when manually-operated or automatically tripped.

Circuit Breakers which are also packaged for easy stocking on dealer's shelves are interchangeable so that it is as easy as changing a light bulb to make changes or add new units.

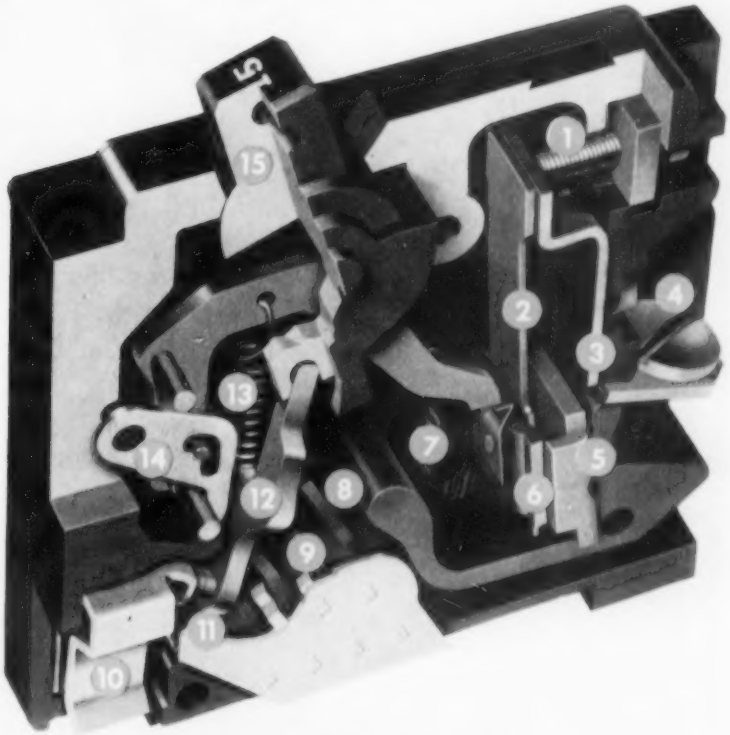
Capacities of the Circuit Breakers are 10, 15, 20, 30, 40, and 50 amps., 4 to 42 poles, 120/240 volts 3-wire single phase and 120/208 volts 4-wire three phase mains with lugs only or main circuit breaker.

If you are not already stocking these panels then arrange to do so today. Recommend them to all your customers for lighting branch and other circuits where safe, dependable automatic protection is desired. You'll find it pays. For further information contact your nearest FA representative listed in Sweets.

QP QUICKLAG P —
a plug-in thermal-magnetic type featuring QP Quicklag P., Circuit breakers. Screwless assembly (just slip the breakers in) one pressure type of connection between circuit breaker and bus bar and sequence bussing to balance the load to permit double pole individual trip combinations and single pole circuit breakers with common trip are other features. Panel is compact and has standard knockouts at top and bottom.

QS QUICKLAG S —
a thermal-magnetic Circuit breaker type with screw connection to bus bar. Features QS Quicklag S Circuit Breakers, sequence bussing to balance the load to permit double pole individual trip combinations and single pole circuit breakers with common trip. Furnished in standardized cabinets with standard knockouts, top and bottom.

circuit breaker features...

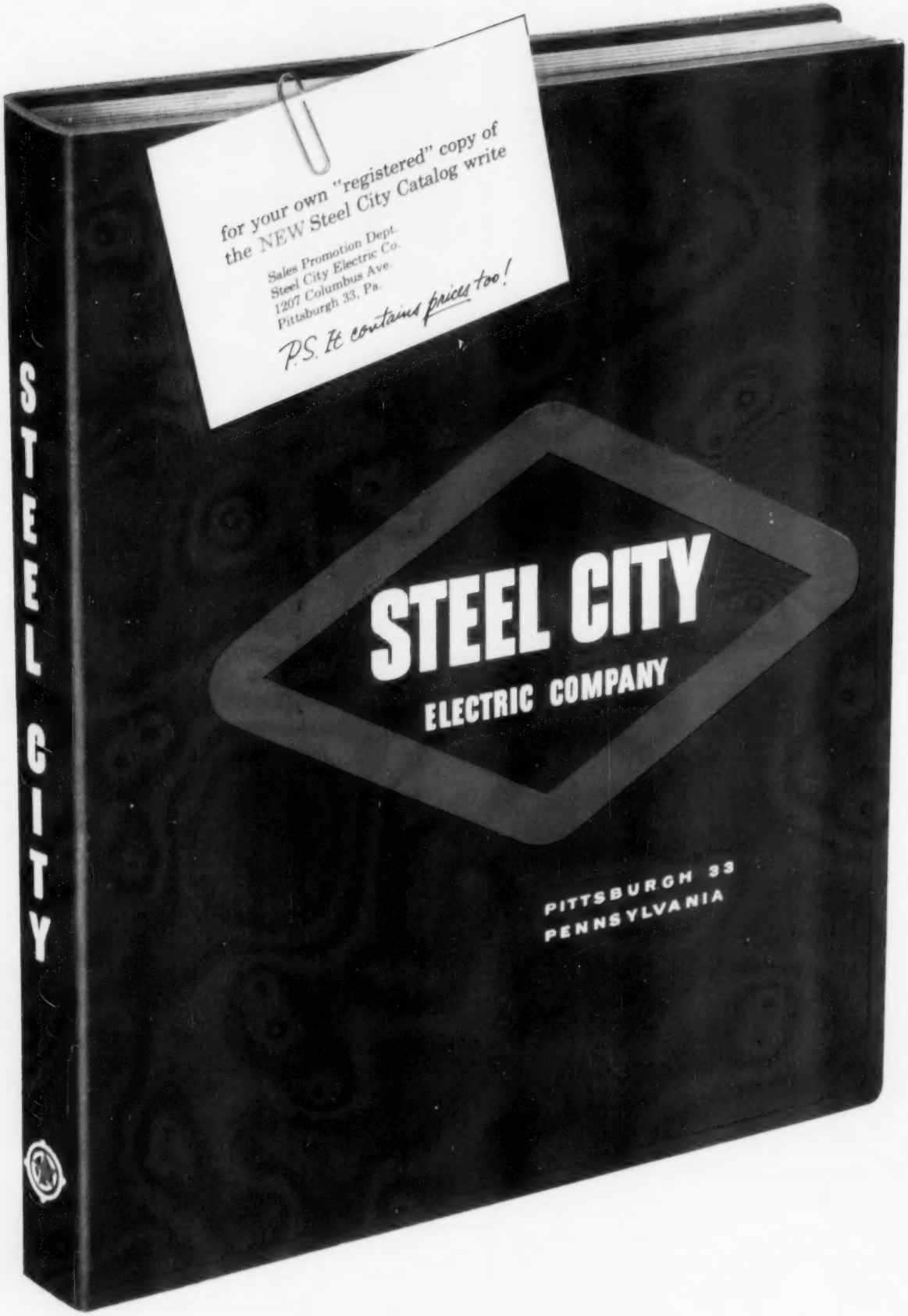


1. Calibration Screw
2. Bi-Metal Thermal Element
3. Current Flow Path
4. Load Terminal
5. Magnet Spring Cushion
6. Hi-Current Magnets
7. Flexible Current Carrying Pig-Tail
8. Cold Cathode Arc Cooling Chamber
9. Cooling Fins
10. Line Side Plug on Contact
11. Electro-Welded Non-Freezing Contacts
12. Tumbling Contact Lever
13. Quick Make and Quick Break Spring
14. Safety Kick Lever
15. Operating Handle

FRANK ADAM *Electric Company*

BOX 357, MAIN P. O. • ST. LOUIS 3, MO. • Phone JEfferson 3-6550

makers of: *busduct • panelboards • switchboards • service equipment safety switches • load centers • Quikheter*


for your own "registered" copy of
the NEW Steel City Catalog write
Sales Promotion Dept.
Steel City Electric Co.
1207 Columbus Ave.
Pittsburgh 33, Pa.
P.S. It contains prices too!
STEEL CITY
STEEL CITY
ELECTRIC COMPANY
PITTSBURGH 33
PENNSYLVANIA

Who's cutting whose throat?

THE "scourge of below cost bidding" continues to eat away at the contracting industry – *and this in a time of the greatest construction boom in history!*

Why? Shortage of electricians is chronic! Thousands are badly needed across the country to meet the mounting needs of commerce, industry and the mushrooming home modernization market.

Yet in spite of this, the industry seems caught up in a give-away mania that's leaving millions of dollars on the bidding tables.

Why? Well, several reasons. Some contractors underbid simply because they don't know their own costs. Others, possessed by an urge to keep up a big front, try to maintain volume at any cost. Still others underbid merely to squeeze out competition and wind up on top.

The fact is that any selling involving consistent price cutting is suicidal – a form of salesmanship that can only lead eventually to large losses and bankruptcy.

A Way Out

Any way out of the squeeze? Yes, there is! This year the Electrical Industry is spending close to $10 million to help drop a *multi-billion dollar* Adequate Wiring market right in the contractor's lap.

And make no mistake about it, this rewiring business can be the highest profit business on your books – plenty of contractors have already proved it.

They like it because it helps take them out of the price squeeze. When a contractor sells a homeowner, for example, on the idea of "living better electrically," the only way competition can beat him out is by selling better ideas (selling up) – not by offering a cheaper job.

How To Get Your Share

Some contractors will wind up with a bigger share of the market than others. You can be one of these by following these suggestions: tie in with such powerful national promotions as the "Housepower" and "Live Better ... Electrically" Campaigns.

Sell the advantages of modern electrical living at every opportunity – through friends, civic and trade associations, neighbors.

Thirdly, present these advantages to your customers in terms they can understand – not in technical jargon. They'll buy when you point out the safety, comfort and convenience of a modern electrical system.

You, the contractor, are the industry's most intimate contact with the consumer. It is to you he will turn for the professional advice he needs. You should be prepared to fill that need.

Published in the interests of the Electrical Industry. Reprints of this message are available by writing to Dept. EWA at:

MURRAY MANUFACTURING CORPORATION

1250 Atlantic Avenue, Brooklyn 16, New York

Manufacturers of: Safety Switches, Service Entrance and Meter Mounting Equipment, Fuse Panels, Fully Magnetic Circuit Breakers and Load Centers.

ADEQUATE WIRING SERVES AND SAVES

HOUSEPOWER

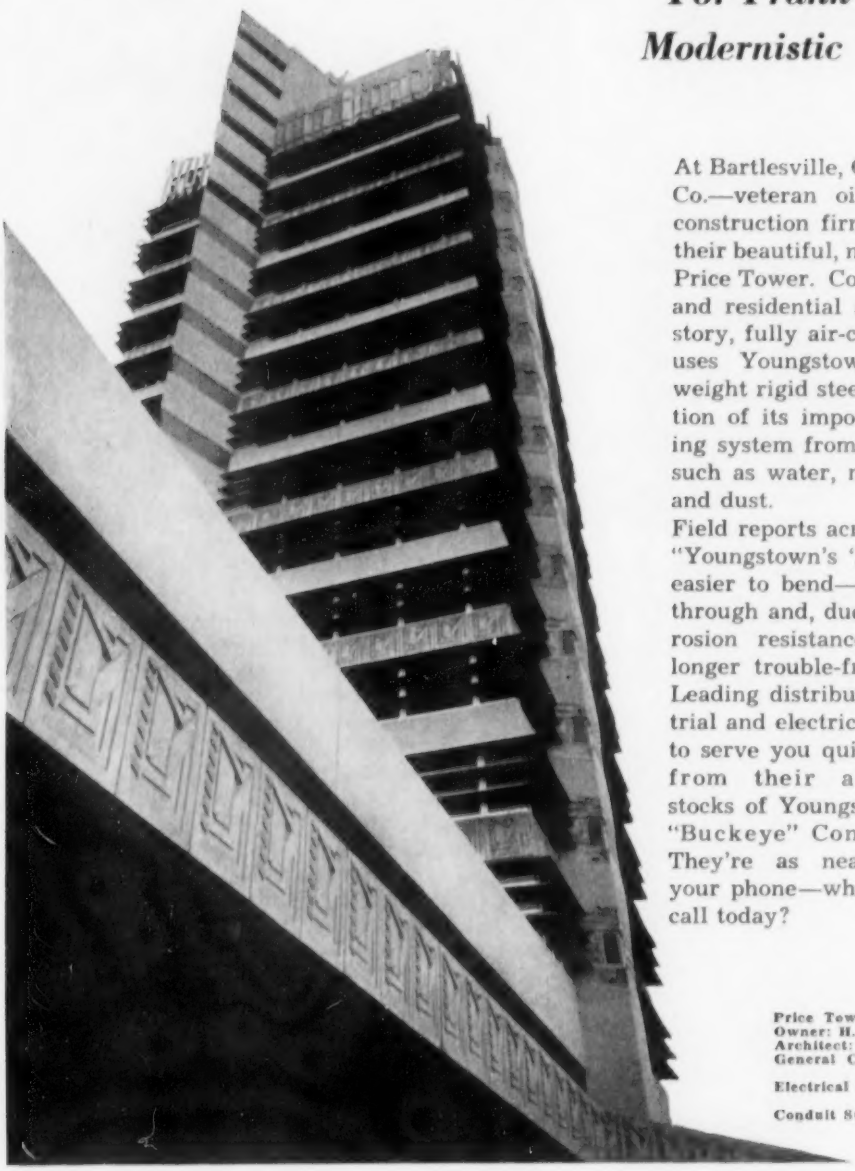
LIVE BETTER ELECTRICALLY

OPERATION Better Your Life HOME IMPROVEMENT

FOR A HAPPIER AMERICA AT HOME

YOUNGSTOWN "BUCKEYE" CONDUIT

. . . Provides Lifetime Wiring Protection For Frank Lloyd Wright's Modernistic Price Tower



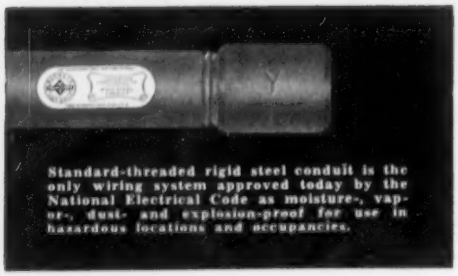
At Bartlesville, Okla., the H. C. Price Co.—veteran oil and gas pipeline construction firm — recently opened their beautiful, new cantilever-design Price Tower. Containing both offices and residential apartments, this 19-story, fully air-conditioned structure uses Youngstown "Buckeye" full-weight rigid steel conduit for protection of its important electrical wiring system from damaging elements such as water, moisture, vapor, dirt and dust.

Field reports across-the-nation state: "Youngstown's 'Buckeye' Conduit is easier to bend—easier to fish wires through and, due to its superior corrosion resistance, affords a much longer trouble-free service life."

Leading distributors in every industrial and electrical market are ready to serve you quickly and efficiently from their ample stocks of Youngstown "Buckeye" Conduit. They're as near as your phone—why not call today?

QUALITY YOUNGSTOWN SERVICE

Price Tower, Bartlesville, Okla.
Owner: H. C. Price Co.
Architect: Frank Lloyd Wright
General Contractor: Culwell Construction Co., Oklahoma City, Okla.
Electrical Contractor: Industrial Electric Co., Oklahoma City, Okla.
Conduit Supplier: Westinghouse Electric Supply Co., Oklahoma City, Okla.



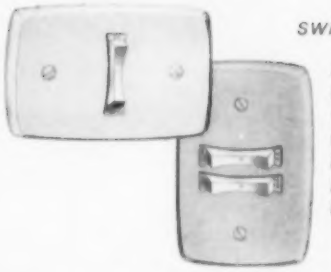
Standard-threaded rigid steel conduit is the only wiring system approved today by the National Electrical Code as moisture-, vapor-, dust- and explosion-proof for use in hazardous locations and occupancies.

THE YOUNGSTOWN SHEET AND TUBE COMPANY

Manufacturers of Carbon, Alloy and Yoloy Steel

General Offices - Youngstown 1, Ohio

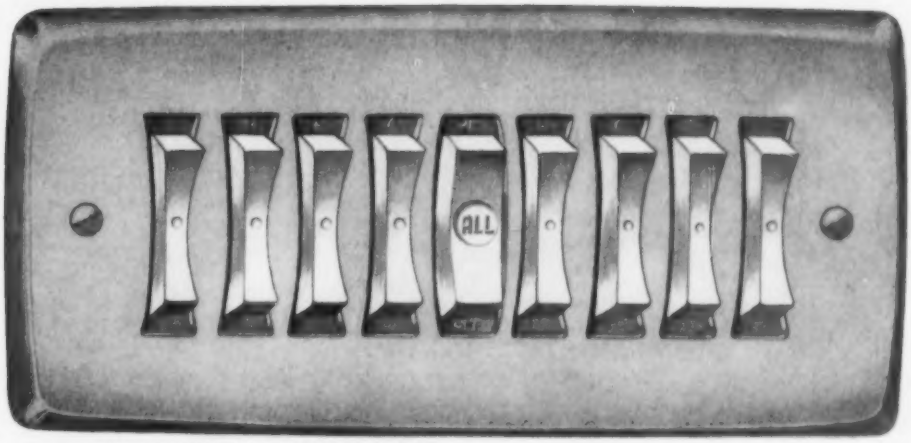
District Sales Offices in Principal Cities



switches your customers want

Here's the "something new to talk about" that you've been waiting for. They're not just remote control switches, not just low voltage switches, they're Remcon's dramatic, new, high-fashion switches.

REMCON the easiest switch to install... is now the most beautiful switch of all!



master control with one-hand operation

You can control lights in 8 rooms individually or all 8 simultaneously with one switch. Definite on-off positions. Completely fool-proof operation. Color-coded for instant identification of each switch.

complete line of matching switchplates

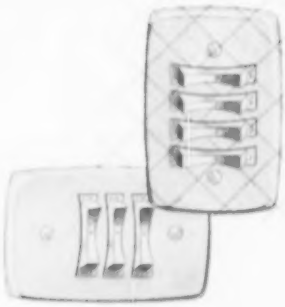
for 1, 2, 3, and 4 switches. Choice of buff or transparent wth gold insert . . . the insert can also be used as a template to cut out matching wallpaper or can be painted to match the wall. All switches glow in the dark.

exciting fashion-wise design

Here's what we give you to sell to your architect, builder and contractor customers. No other switch offers you the handsome contours of the REMCON plate, sweeping down towards the switches . . . or the fashion-engineered "butterfly" design of the REMCON switches themselves. No other switch adds such a gracious note to any decor—period or modern.

easy, remcon low-voltage installation

The only low-voltage system with the transformer built right into the relay. It's the new, modern, simplified wiring method. And now, with the new high-fashion REMCON switch line, you have an unbeatable volume-building combination.



ask your Pyramid Rep to show you

REMCON® HI-FASHION SWITCHES

Pyramid Instrument Corporation, Lynbrook, N. Y. makers of REMCON LOW-VOLTAGE SWITCHING

"CORDON" CIRCUIT BREAKERS

Widely accepted for high fault protection on low voltage applications

...4 frame sizes available for immediate delivery

Conceived and engineered at I-T-E. Recognizing the need for a practical and economical means to adequately protect low-voltage distribution circuits where very high fault currents are encountered, I-T-E engineers conceived and developed the first completely integrated current-limiting molded case circuit breaker. Named the "Cordon", this compact circuit breaker has an interrupting rating of 100,000 rms amperes.

Manufactured and tested by I-T-E. The "Cordon" combines all the design and operating advantages of standard I-T-E molded case circuit breakers with the proven high interrupting ability of current limiting Amp-Traps.* A prototype of this was developed, tested and retested until it met the rigid I-T-E standards. Then, and only then, was a complete line offered to industry. Four frame sizes are now available.

*Amp-Trap: T.M. Reg. The Chase-Shawmut Co.

Widespread acceptance. Now thousands of delivered "Cordon" circuit breakers prove industries' acceptance of this device and confirm I-T-E's belief in the need for it. More and more "Cordon" circuit breakers are being specified as the practical, economical answer for low voltage, high fault applications.

Learn more about this new concept in circuit protection. Contact the I-T-E sales office nearest you, or write for Bulletin 5042A.

I-T-E CIRCUIT BREAKER COMPANY • Small Air Circuit Breaker Division

19th & Hamilton Sts., Philadelphia 30, Pa.

225 amp CK frame

400 amp CKL frame

600 amp CL frame

100 amp CF frame

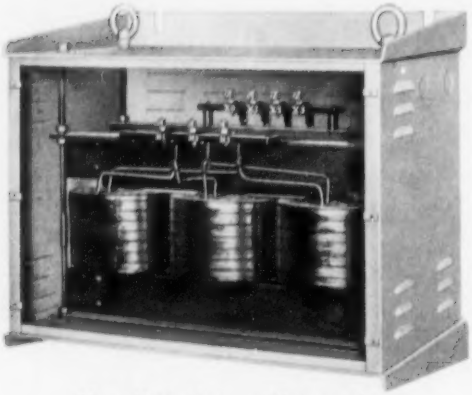
Engineers are now specifying these I-T-E Current-Limiting "Cordon" Circuit Breakers.

Immediate delivery can be made on all four frame sizes, for 600 v a-c and 250 v d-c service, 15 to 600 amperes.

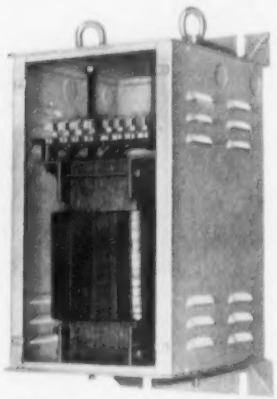
I-T-E

SORGEL dry-type transformers are *really different!*

They are not just ordinary transformers



15 to 50 Kva 3-phase. Wall mounting. Connection compartment panel removed



20 to 75 Kva single phase. Wall mounting. Connection compartment panel removed

SORGEL TRANSFORMERS

Compare and check these features:

QUIET OPERATION — The sound level of SORGEL dry-type transformers is well below the established standards. Therefore they are adaptable for any indoor installations, including those structures where sound levels are an important factor.

HIGH EFFICIENCY — SORGEL dry-type transformers are designed to carry the full rated load at high efficiency.

SAFE TEMPERATURE — SORGEL dry-type transformers have a safe operating temperature.

EASY INSTALLATION — Wall brackets or floor mounting bases are an integral part of SORGEL dry-type transformers. All are equipped with solderless terminal lugs. Terminal board for the larger ratings.

UNDERWRITERS' APPROVED in all the ratings covered by the Re-examination Service, both single phase and 3-phase. They also meet or exceed the requirements of ASA, AIEE, and NEMA standards.

LONG LIFE — Thermo-vacuum impregnated windings brazed to solderless terminals assure years of trouble-free service.

Available in all standard and intermediate ratings and voltages — 1/4 to 3000 Kva up to 15000 volts.

SUBSTATIONS — SORGEL transformers, either dry-type or Askarel-cooled, are incorporated in substations, complete with primary or secondary switchgear. They are procurable with any make of switchgear, and from any substation manufacturer.

SORGEL ELECTRIC CO. 832 WEST NATIONAL AVE., MILWAUKEE 4, WIS.

Sales Engineers in Principal Cities

WHICH ONE

...for the safety of your installation?

Yes, both are rigid steel electrical conduit—but that's where the similarity ends! The National Electric Sherarduct conduit (on the left) is different in one vital way—it is lifetime protected by the unique Sherardizing process of dry galvanizing which actually alloys pure corrosion-proof zinc to the steel walls—threads and all. That's why you'll never see Sherarduct deteriorate like ordinary conduit (on the right). For thousands of structures, this Sherarduct protection has meant conduit life way beyond the life of the building.

A Sherarduct installation is the true mark of a quality wiring job. It means positive protection of the electrical system with no costly conduit replacements due to corrosion. Remember these factors—and what they can mean to your installation. Make sure NE Sherarduct is specified for your job.

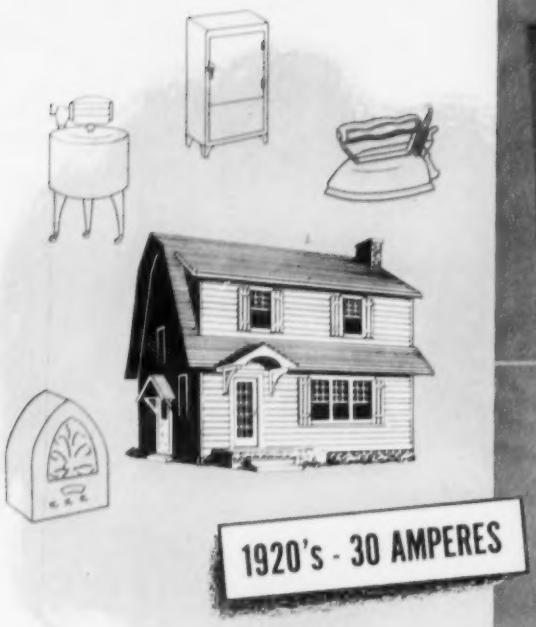
Sherardizing is Galvanizing at its Best!

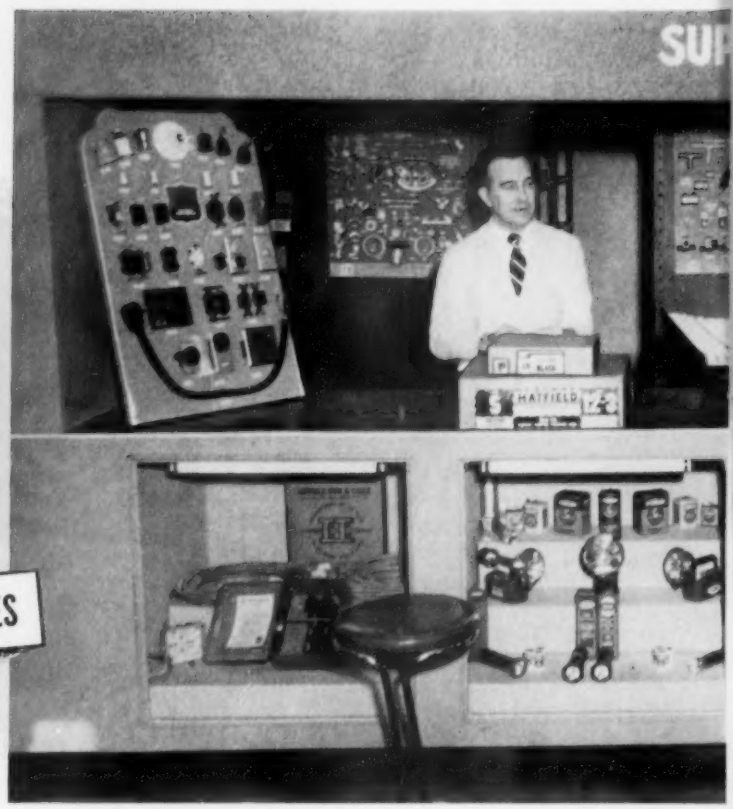
Sherarduct is Galvanized Conduit at its Best!

National Electric Products

PITTSBURGH, PA.

2 Plants • 11 Warehouses • 35 Sales Offices





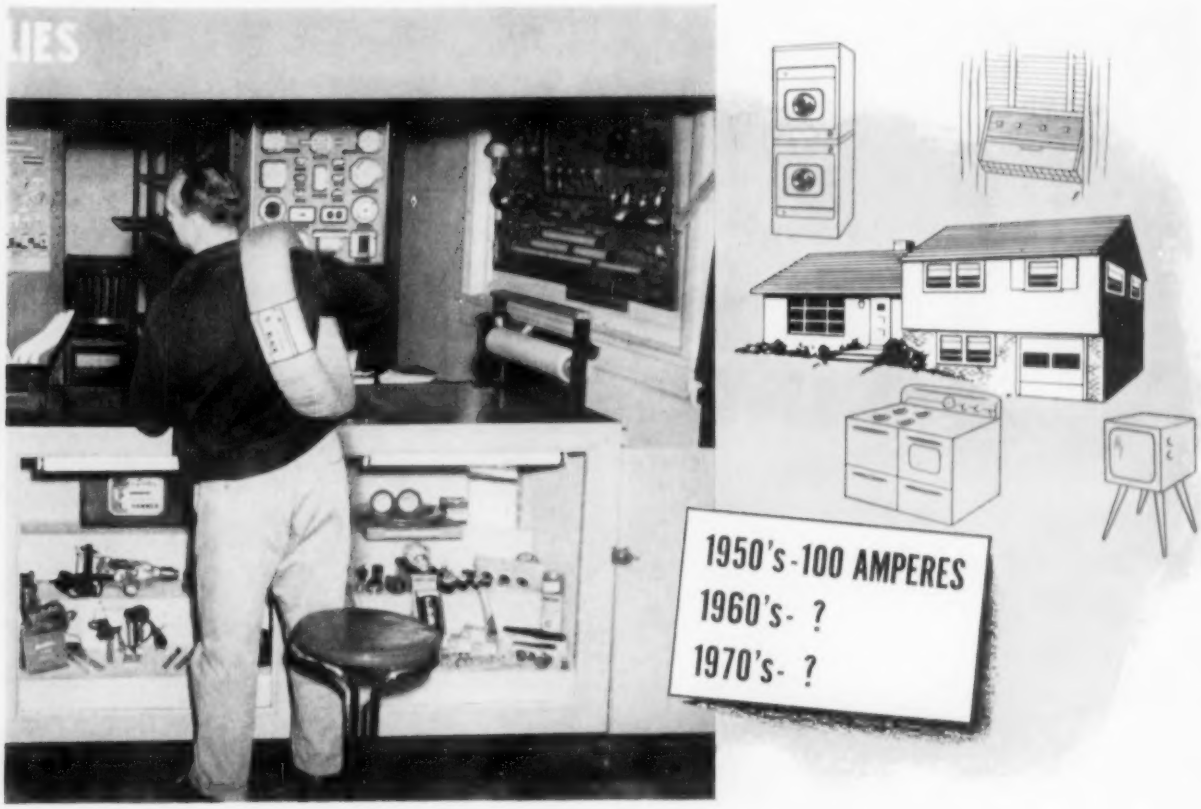
YOU'RE "WIRED" FOR GR

the latest and best in adequate wiring for better electrical living!

GROWTH OPPORTUNITY! You've seen the changes the past years have brought. Now—look ahead to the future and the opportunities for still greater growth presented by the steadily growing demand for adequate wiring in the home and industry. It's time to get "wired" for growth with Hatfield! Hatfield is a pacesetter in research, product development and service. You can always count on Hatfield for electrical wire that meets or exceeds the highest specifications, and for the prompt delivery of what you want in the sizes and quantities you need.

A Hatfield sales office is as near as your phone!

FOR THE BEST DEAL IN CARTON, COIL OR REEL . . .
DEAL WITH HATFIELD!



OWTH WITH HATFIELD!

NEW, UP-TO-THE-MINUTE SPECIFICATIONS BOOKLETS—

Get your free copies of Hatfield's new specifications booklets: "RR Cable"—"Control Cable"—"Building Wire." Write today!

MANUFACTURERS OF ALL TYPES OF INSULATED WIRE & CABLE

HATFIELD WIRE & CABLE

DIVISION OF CONTINENTAL COPPER & STEEL INDUSTRIES, INC.

EXECUTIVE OFFICES: HILLSIDE, NEW JERSEY

3 COST CUTTING TIME SAVING

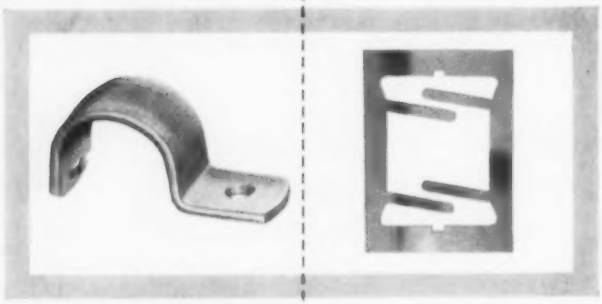
electrical fittings from **Blackhawk**

Available in a full range of sizes from ½" through 4".

JUST SLIP IT ON

Installation of the exclusive Blackhawk slip-fitter service entrance head is easier and faster. There are no threads to cut, no extra clamping devices to use. Just slip it on over the conduit and tighten two set screws. It's that fast . . . that simple. Contractors have reported saving $5 to $10 per installation with the Blackhawk slip-fitter service entrance head.

Pat. applied for.



Snap! It's on to stay. Blackhawk snap strap has the exclusive "hold bump." Ribbed bracket adds to the snap, provides rigid contact support of the conduit.

Pat. applied for.

Installed in seconds. Blackhawk one piece box support is inserted all at once. Tabs are bent around wall edge and the box support is ready to receive the switch box. After insertion of switch box, tabs are bent to inside, holding the box firmly.

Patent No. 2518912

Specify B-I when you buy

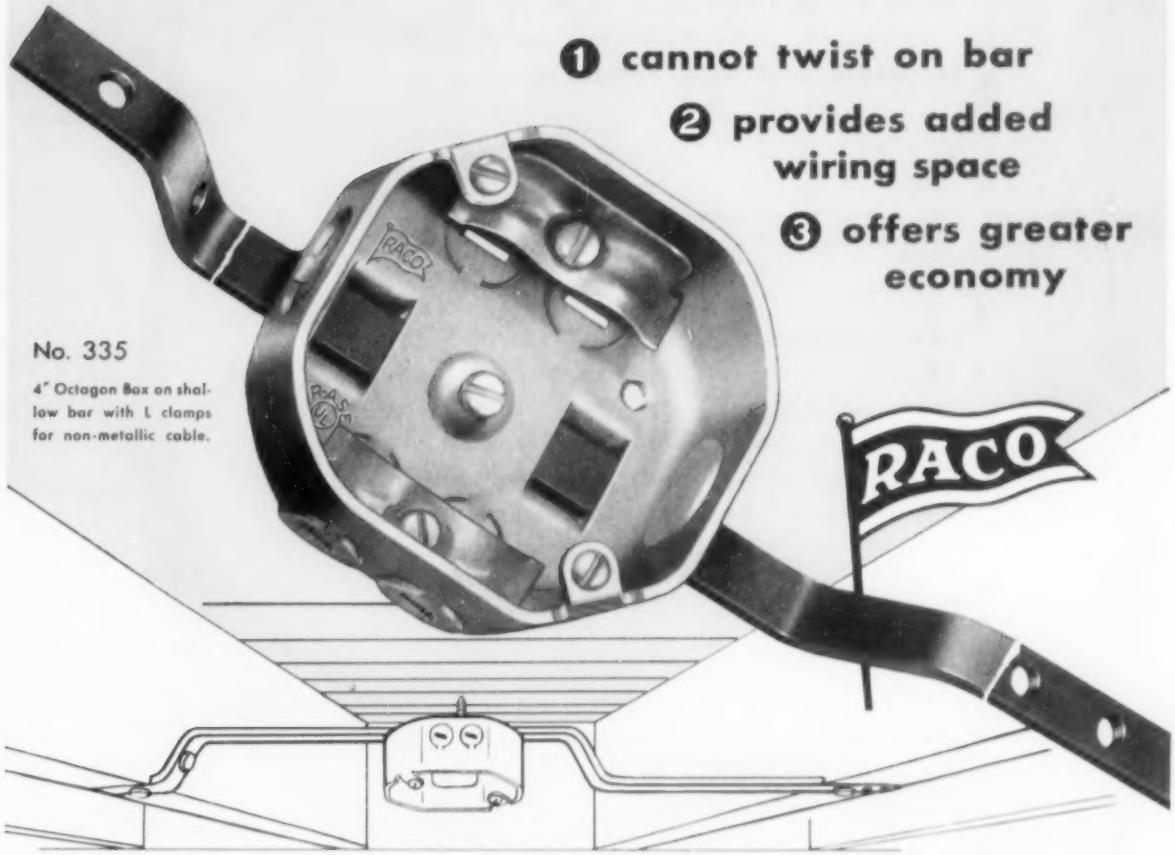
Blackhawk Industries

BLACKHAWK INDUSTRIES

Dubuque, Iowa

New RACO NO-STUD SET-UP BOX

SAVES TIME • SAVES MONEY on every ceiling installation!



USE NEW RACO NO-STUD SET-UP BOXES ON ALL THOSE COMPETITIVE JOBS

CEILING FIXTURES · CLOSET LIGHTS · ATTIC LIGHTS
PORCH FIXTURES · BATHROOM LIGHTS · BASEMENT JUNCTION BOXES
AND SIMILAR INSTALLATIONS

You save money both ways with this New Raco No-Stud Set-Up Box . . . lower first cost and lower labor cost on installation. It enables you to make real money on those competitive jobs.

Hardened set-screw with locking point secures box in desired position. Box cannot turn or twist on bar. No stud means more wiring space . . . faster and easier installation.

Two Popular Sizes

3½" OCTAGON

On Shallow offset bar with Raco L clamps for non-metallic cable only.

4" OCTAGON

On Shallow or deep offset bars. Complete with X clamps for metallic cable or L clamp for non-metallic cable.

WRITE TODAY . . . GET ALL THE FACTS

ASE RACO

"A RACO BOX FOR EVERY NEED"

ALL-STEEL EQUIPMENT INC. *Aurora, Illinois*

MEN RESPONSIBLE FOR

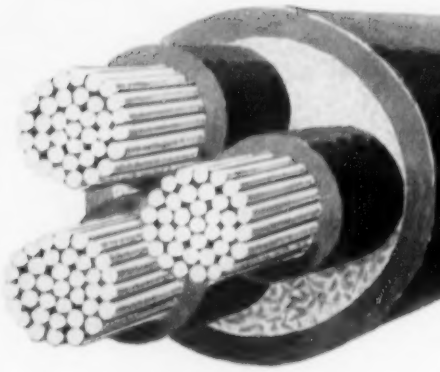
POWER DISTRIBUTION KNOW...

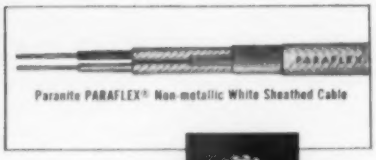
IF IT'S PARANITE IT'S RIGHT!®

FROM POWER CABLE TO FIXTURE WIRE...

Paranite has earned an unquestioned reputation for quality wire products and dependable service! Such well known products as Paranite PARAFLEX® non-metallic white sheathed cable and PARASYN® small diameter building wire have become "tools of the trade" with experienced contractors everywhere! On your next installation ... specify PARANITE® for a wire of proven performance.

LIVE BETTER ELECTRICALLY





Paranite PARAFLEX® Non-metallic White Sheathed Cable

PARANITE WIRE AND CABLE

DIVISION ESSEX WIRE CORPORATION

FORT WAYNE 6, INDIANA

MANUFACTURING PLANTS: ***Birmingham, Alabama; Anaheim, California; Jonesboro, Indiana; Marion, Indiana**

Warehouses* and Sales Offices

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Cleveland, Ohio
Dallas, Texas
*Detroit, Michigan
Hartford, Connecticut
Indianapolis, Indiana
*Kansas City, Missouri
*Los Angeles, California
*Newark, New Jersey
Omaha, Nebraska
*Portland, Oregon
Upper Darby (Philadelphia), Pa.
Rochester, New York
*Saint Louis, Missouri
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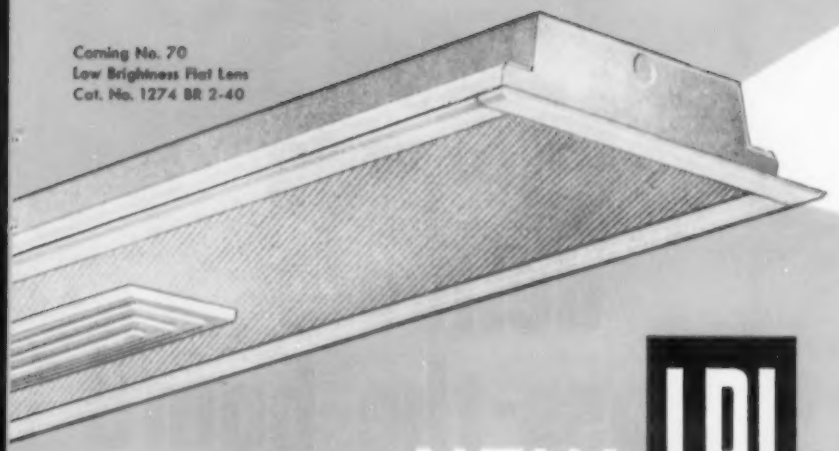
Springfield, Illinois

Only 2 7/8" above ceiling line



NEW LPI

Thin-Lite TROFFERS

Require less than ½ the depth of ordinary troffers

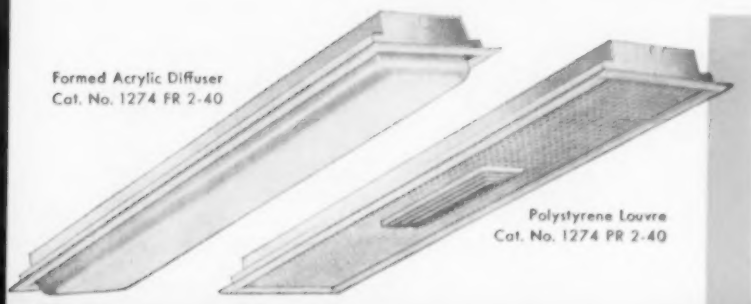
In new buildings, Thin-Lite Troffers can be used in shallow ceiling slabs and also provide, where required, extra room for air conditioning ducts, piping, etc.

In old buildings, where modernization requires suspended ceilings, the depth saved by the use of Thin-Lite Troffers allows more duct room and head room.

Finest construction combined with functional design give Thin-Lite Troffers a clean-cut appearance when installed. Choose from three types of shielding and diffusing media: Polystyrene louvre panel, Corning No. 70 low brightness flat lens, or formed Acrylic diffuser. For your next installation specify Thin-Lite Troffers.

Certified Lighting for a Better America

Mail Coupon for Detailed Information about Thin-Lite Troffers



LIGHTING PRODUCTS, INC. Dept. 3C • Highland Park, Illinois

Please send me a copy of Thin-Lite Troffer Brochure No. 545

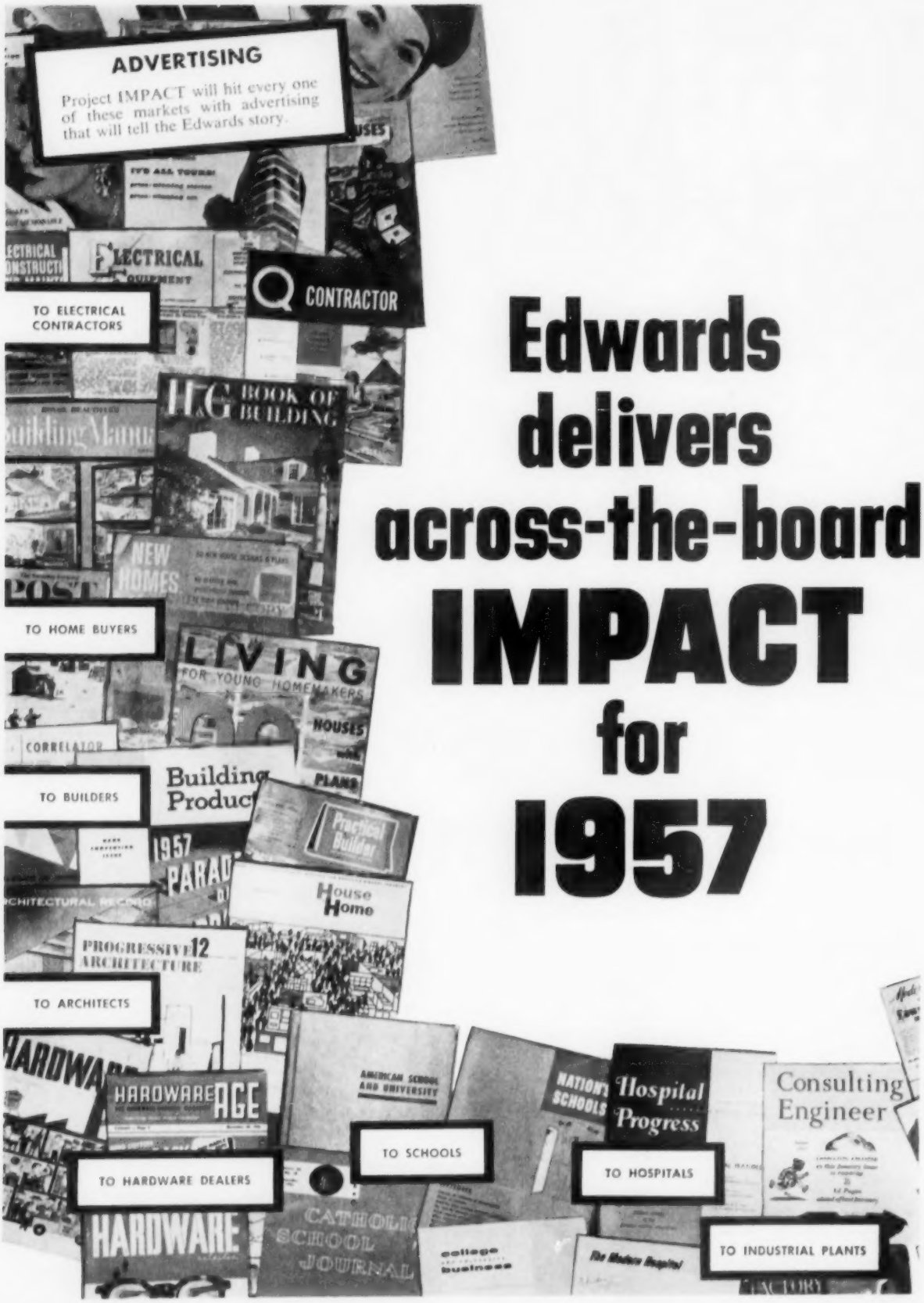
Name _____ Position _____

Company _____

Address _____

City _____ Zone _____ State _____

6102


ADVERTISING
Project IMPACT will hit every one of these markets with advertising that will tell the Edwards story.
TO ELECTRICAL CONTRACTORS
CONTRACTOR
TO HOME BUYERS
TO BUILDERS
TO ARCHITECTS
TO HARDWARE DEALERS
TO SCHOOLS
TO HOSPITALS
TO INDUSTRIAL PLANTS
Edwards delivers across-the-board IMPACT for 1957

Impact...that's the note Edwards will strike in 1957. And it means more sales in more markets for you. It's another step in identifying Edwards as the world leader in signaling devices of all kinds. To implement project IMPACT, Edwards will cover the nation with advertising and sales promotion. There'll be advertising aimed at every market you sell, special ads directed at consumers, promotions that will make Edwards a by-word for builders, contractors and architects. In addition, Edwards 1957 plans include a full quota of special tie-ins. Edwards equipment will appear in model homes, special exhibits and trade shows...Edwards publicity will result in special features all over the country.

No matter how you look at it, no one will be able to match Edwards' project IMPACT. And it all means that your sales are going to be higher than ever before. Just look at some of the special plans Edwards has to help you sell!

NOW IS THE TIME FOR YOU TO TAKE ADVANTAGE OF PROJECT IMPACT!

For the full story about Edwards' 1957 Project IMPACT see your Edwards sales representative or write the EDWARDS COMPANY, Inc., Norwalk, Connecticut. (In Canada: Edwards of Canada, Ltd., Owen Sound, Ontario.)

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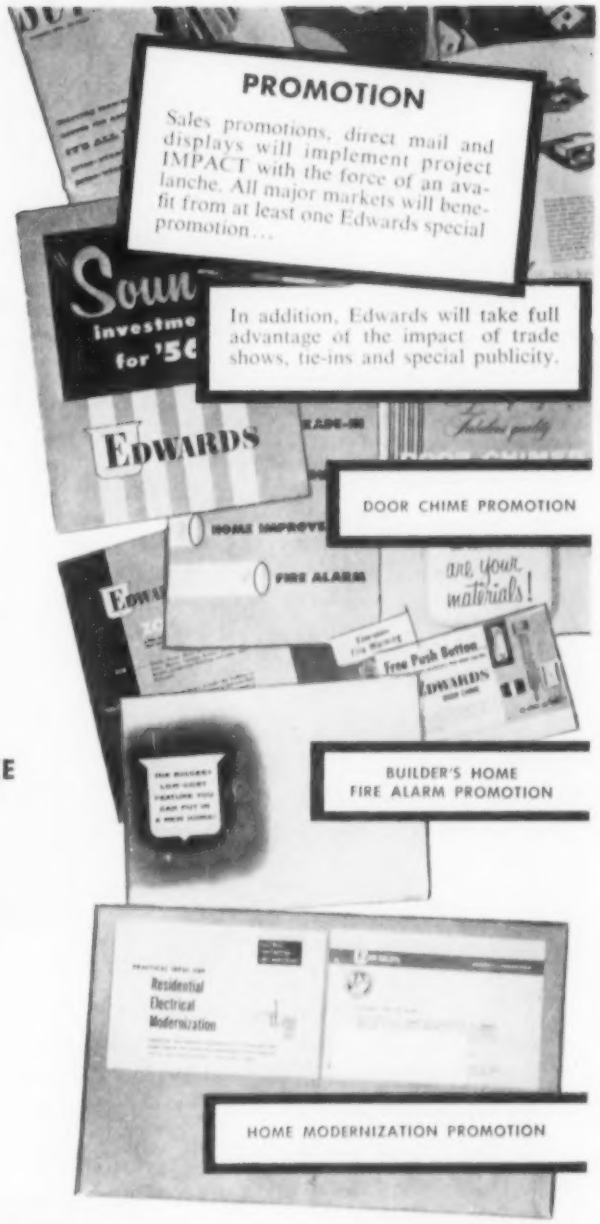
EDWARDS

Specialists in Signaling since 1872



Specify Red "D"* Portable Cord

with "built-in"... **PM***

Diamond Type MD* heavy, medium and light duty flexible cordage . . . rubber insulated with rubber or neoprene jacket.

Maximum flexibility, moisture resistant. Conveniently marked-to-measure!

Diamond DTX* Non-Metallic WHITE Sheathed Cable. Non-sticking, smooth and easy to pull. Clean to handle. does not flake off!

PREVENTIVE MAINTENANCE gets top priority from industrial management . . . so when the job calls for an industrial application of Portable Cord, specify the product with "built-in" PM! Diamond Portable Cord and Red-D-Prene* assure the industrial user maximum protection against costly downtime caused by cord failures. The tough, oil and abrasion resistant sheaths give long wear, reduce maintenance costs. Red-D-Prene, first portable cord produced in Industrial Red, is readily identified . . . thus minimizing accidents.

Trade Mark

DIAMOND

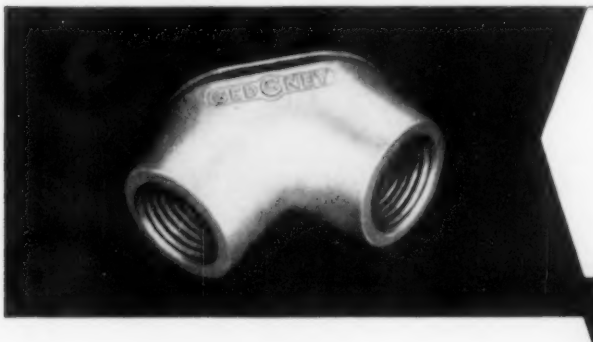
WIRE and **CABLE** Company

Sycamore, Illinois

GEDNEY'S RIGHT THERE IN YOUR CORNER

helping save time . . . hold down costs

CORNER FITTINGS? Well, here are three that have proved immensely popular for the simple reason they're easiest to install—save time and labor that really counts up. Like the rest of the full Gedney line they're made of unbreakable malleable iron...accurately machined and threaded . . . individually inspected. Order Gedney—always—for lowest installed costs!

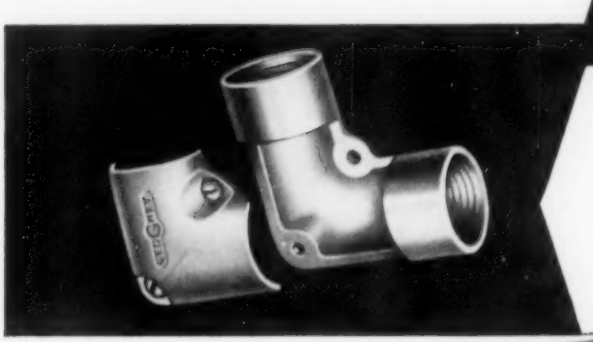


90° CORNER ELLS

Fitted with gasketed cover. Both ends female. Made of malleable iron, cadmium plated. Available in a full range of sizes from ½" to 2".

90° CORNER ADAPTERS

Fitted with gasketed cover. One end male, one end female. Made of malleable iron, cadmium plated. Your choice of sizes from ½" to 2".



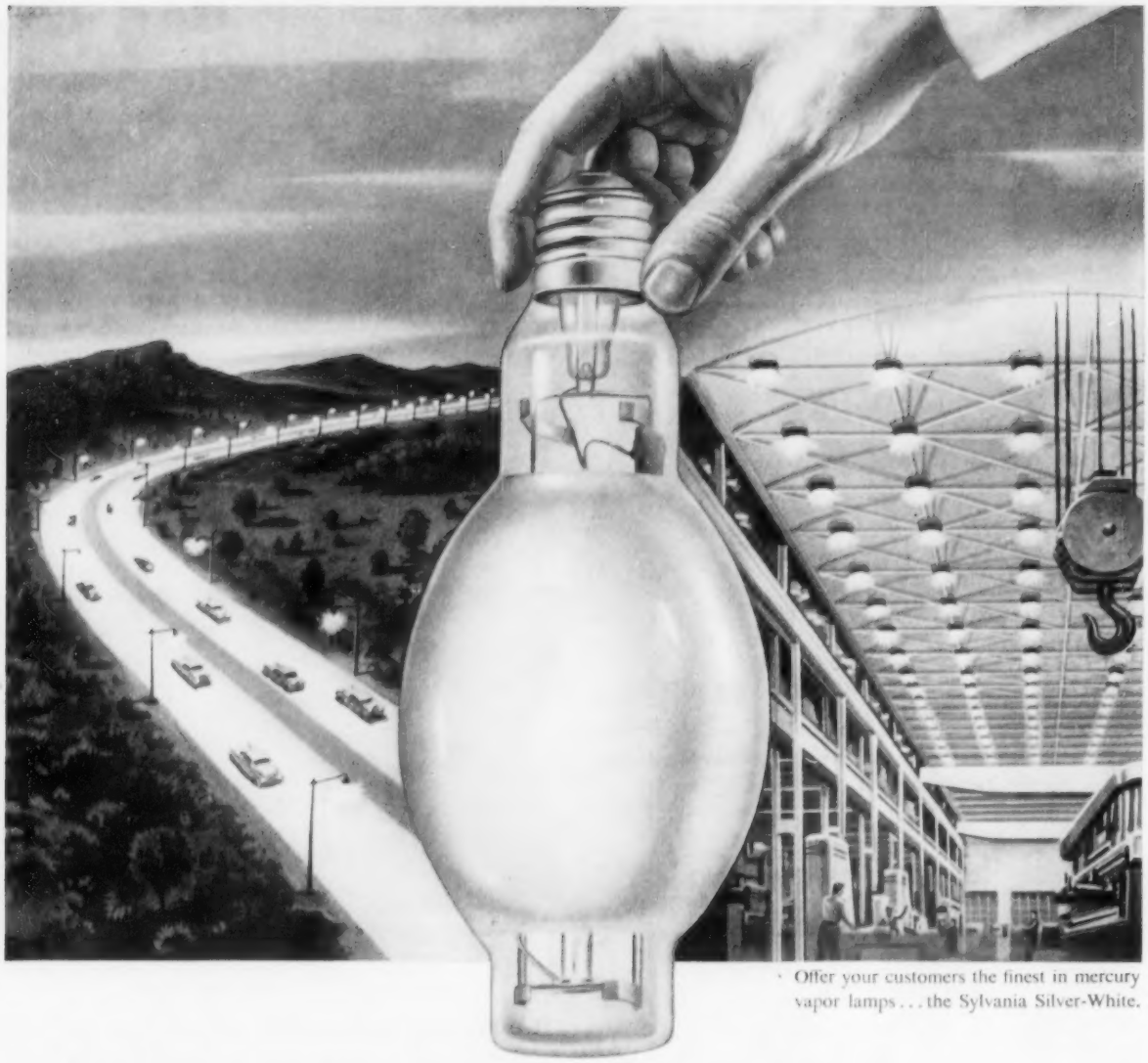
CORNER PULL-IN CONDUIT ELLS

Today's top specification for space-saving, machine wiring, easy wire pulling. Malleable iron, cadmium plated. Sizes run from ½" to 2".

GEDNEY FITTINGS FIT

GEDNEY
ELECTRIC COMPANY

RKO BLDG. • RADIO CITY • NEW YORK 20
Foundry, Factory and Shipping Point: Terryville, Conn.



Offer your customers the finest in mercury vapor lamps . . . the Sylvania Silver-White.

For highway . . . or high-bay . . .

the one-lamp answer to your customers' lighting needs

Today's most efficient mercury-vapor lamp is the new Sylvania Silver-White.

The greater light output and superior color quality of the Silver-White makes it an effective, versatile lighting source . . . it serves the high requirements for such widely different applications as highway lighting and high-bay plant illumination with unequalled efficiency.

Sylvania's Silver-White actually delivers up to 33% more lumens of light than previous color-improved mercury-vapor lamps. The 100-watt lamps, for example, are producing an unprecedented 4000 lumens in actual installations.

Sylvania Silver-White lamps cost no more than conventional color-improved lamps—but offer the combined economies of superior light output and superior construction.

Silver-White lamps are available in 100-, 175-, 400-, 700-, and 1000-watt types to meet the needs of industry for efficient high-bay indoor lighting and outdoor illumination for parking and loading areas . . . and for the governmental requirements for effective highway lighting.

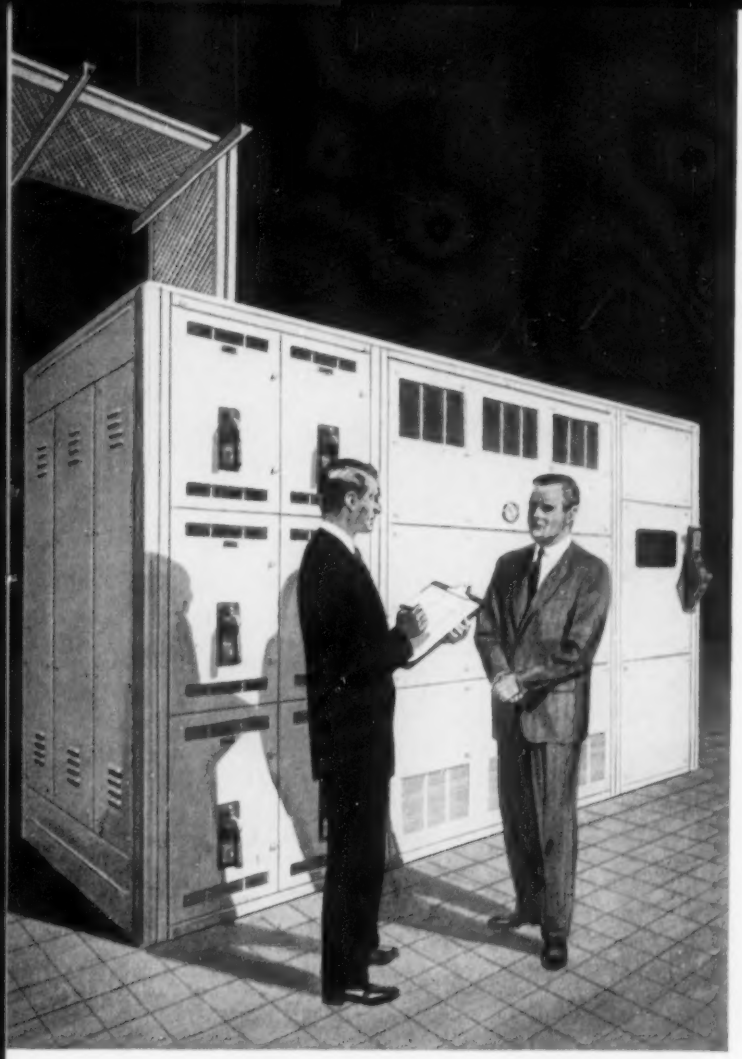
For complete information about the Sylvania Silver-White Mercury Vapor lamp, call your local representative, or write:

SYLVANIA ELECTRIC PRODUCTS INC.
Lighting Division, Dept. 7L-2702
60 Boston St., Salem, Mass.
In Canada: Sylvania Electric (Canada) Ltd., Shell Tower Building, Montreal

SYLVANIA

. . . the fastest growing name in sight

LIGHTING • RADIO • ELECTRONICS • TELEVISION • ATOMIC ENERGY



Unit-Versal® Switchboards permit additional capacity in new switches, even switchboard sections, to be added any time.

Vacu-Break® Power Panels feature interchangeable switch units. Switches are horsepower-rated, have interlocked doors.

Industrial Trol-E-Duct® feeds and supports light power tools on mobile trolleys, literally puts power on wheels!

Your BullDog Field Engineer will be happy to give you any additional facts on modernizing your power system. See him.

Power systems made to order—for you and your customer!

Power that boosts production! This is top priority with your customers—and they depend on you to provide the electrical distribution system that does the job. Give them a head start in the race for higher production figures—plan a BullDog power system that's made to order for specific plant needs.

From secondary unit substations to power panels, BullDog custom-engineered equipment dovetails into an integrated whole that provides for the most efficient and economical use of power. Talk to your BullDog field engineer now. He has the facts that make it easy to lay out and install a flexible BullDog system that delivers adequate power now and for years to come . . . all this spells *customer satisfaction* which leads to more business for you!

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BullDog Electric Products Company, Detroit 32, Michigan • A Division of I-T-E Circuit Breaker Company. • *Export Division:* 13 East 40th St., New York 16, N.Y. • *In Canada:* BullDog Electric Products Company (Canada) Limited, 80 Clayson Rd., Toronto 15, Ont.

IF IT'S NEW . . . IF IT'S DIFFERENT . . . IF IT'S BETTER . . . IT'S

BULLDOG

ELECTRIC PRODUCTS COMPANY

One in a series to emphasize the economy of Electrical Wholesale Distribution

"Been buying direct again, eh, Willoughby?"

"Electrical Wholesaler Distribution reduces the Manufacturer's selling cost and thereby reduces the selling price of electrical supply material to the user. Therefore, our policy has been to distribute Thomas & Betts products exclusively through the Electrical Wholesaler."*

LOOK FOR THIS SIGN — AUTHORIZED DISTRIBUTOR T&B ENGINEERED IT'S THE MARK OF AN AUTHORIZED **T&B** DISTRIBUTOR

THE THOMAS & BETTS CO.
INCORPORATED
20 BUTLER STREET, ELIZABETH 1, NEW JERSEY
THOMAS & BETTS, LTD., MONTREAL, P. Q., CANADA
MANUFACTURERS OF FINE ELECTRICAL FITTINGS SINCE 1898

*Quoted from the T & B Plan of Wholesaler Distribution. If you would like to know the complete story of the T & B Plan, write:

GUTH-LIGHT guards THE EYES OF TEXAS!

4,200 GUTH TROFFERS..... ALZAK ALUMINUM LOWEST LOW-BRIGHTNESS TROFFERS IN NEW U.S.A.A. BUILDING, SAN ANTONIO

Texans think big and demand the best! That's why designers chose Guth Troffers for the magnificent new home office of United Services Automobile Association, San Antonio.

Their distinctive, custom-made look adds beauty to the contemporary decor . . . the shadowless, low-brightness lighting (with at least 65 ft. candles throughout) assures eye-ease and efficiency. What a combination!

And more: Guth's complete-unit design made the installation double-easy. No on-the-job assembly . . . they're ready to hang.

WRITE FOR GUTH TROFFER CATALOG NO. 50-G

ARCHITECTS: Phelps & Dewees & Simmons-Atlee B. & Robt. M. Ayres, San Antonio

ELECTRICAL DISTRIBUTOR: Southern Equipment Co., San Antonio

ELECTRICAL CONTRACTOR: Paul Wright Electrical Co., San Antonio

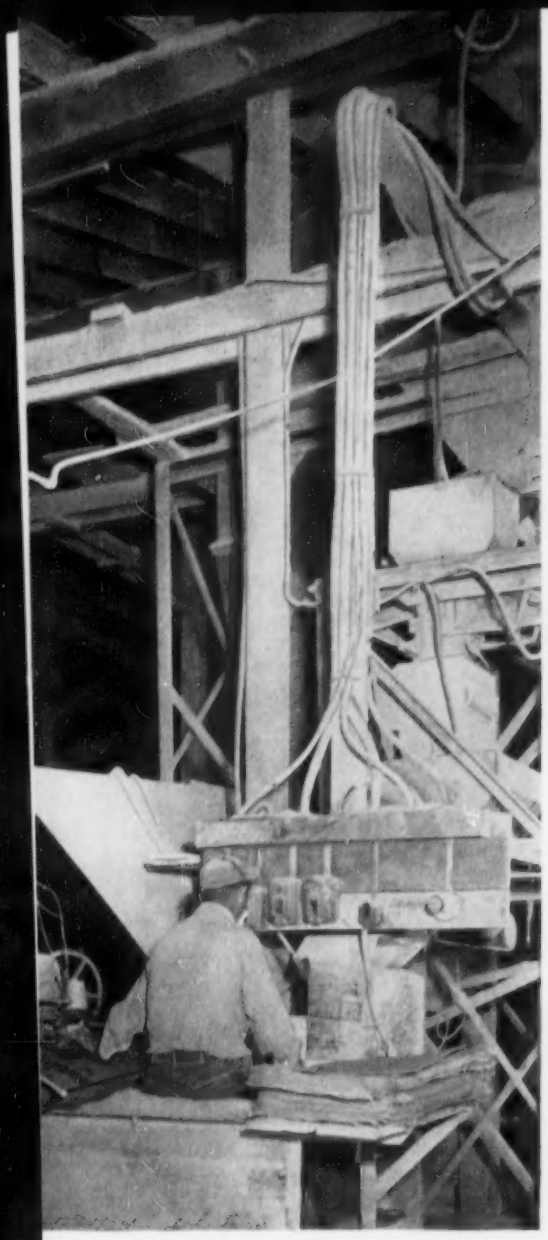
STRUCTURAL ENGINEERS: Matthews & Kenan, San Antonio and Beretta, Greenslade, Clark & Collins, Inc., San Antonio

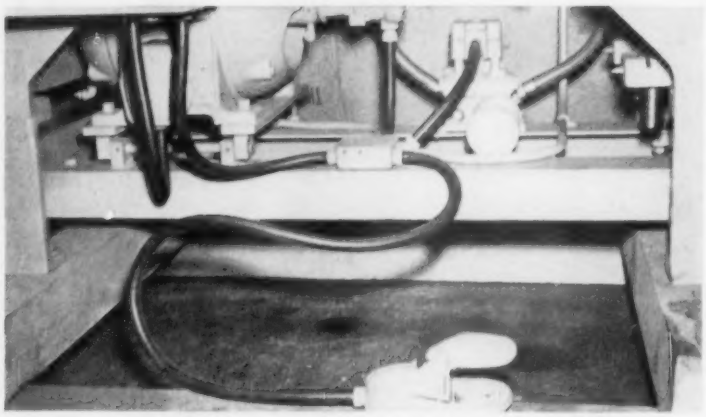
MECHANICAL ELECTRICAL ENGINEERS: Gerard M. Baker, San Antonio, and Beretta, Greenslade, Clark & Collins, Inc., San Antonio

THE EDWIN F. Guth COMPANY · ST. LOUIS 3, MO.

TRUSTED NAME IN LIGHTING SINCE 1902

SEALTITE Flexible Electrical Wiring Conduit makes news

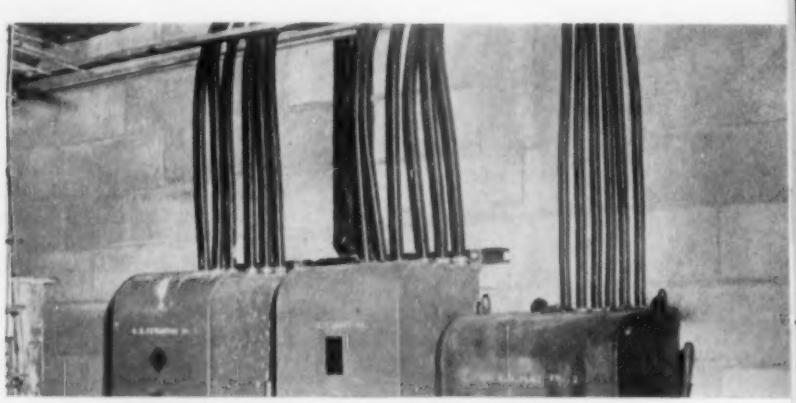




. . . on tube end-forming machines
SEALTITE* Electrical Wiring Conduit is now standard equipment on all tube end-forming machines made by Vaill Engineering Co., Waterbury, Conn. Vaill found most customer specs are copies from J. I. C. — especially sections dealing with wiring in wet or oily locations. And SEALTITE Type E.F.† (Extra Flexible) meets J.I.C. requirements. "SEALTITE presents good contour-hugging appearance," says Vaill. Because it is *flexible*, SEALTITE absorbs vibration and protects wiring to moving parts. SEALTITE is easy to install, too. There's no threading. No cumbersome tools are needed. No special skill is required.

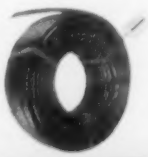
*Trademark †Pat. Applied For 54177

. . . in a fertilizer plant
Phosphoric acid in the form of dust quickly ate through neoprene covered wiring at a Midwestern fertilizer plant. Then SEALTITE Type E.F. (Extra Flexible) was installed to protect power and lighting wiring. Since then there's been no trouble. SEALTITE's tough synthetic cover gives complete, permanent protection against moisture, oil, dirt, grease, chemicals and corrosive fumes. Lightweight SEALTITE comes in easy-to-handle coils and can be cut to required lengths.



. . . in a yarn and knit goods dye house
American & Efird Mills, Mount Holly, N. C., knew electrical equipment in their new textiles dye house would operate under very severe corrosive conditions. At first, some rigid conduit was installed along with SEALTITE Type U.A. Acids in the atmosphere caused the rigid conduit to fail rapidly. But SEALTITE Type U.A. — the first *flexible* conduit to win Underwriters' Approval for use where exposed to moisture and mineral oils—took it in stride. Now all rigid conduit is being replaced with SEALTITE. American & Efird reports big time-and-dollar savings in installation, too.

FREE BOOKLET! Write today for your free copy of Bulletin UA-531, describing SEALTITE Types U.A. and E.F. and their applications. The American Brass Company, American Metal Hose Division, Waterbury 20, Conn.



SEALTITE
flexible, liquid-tight electrical conduit
an ANACONDA® product

Another NEW BLACKHAWK aluminum "1-bite bender!"

NOW! Make 90° bends in 1¼" through 3" pipe in one pass

Man, here's the BIGGEST boost *ever* for wholesaler profits! It's Blackhawk's new S-139 featherweight *aluminum* pipe bender! It's a natural equipment sales opportunity demanded by the booming $3,500,000,000 electrical construction market — a hydraulic bender that *has everything!*

Self-selling 103-pound ready-for-work portability — one-bite, 90° bending — for 1¼" to 3" pipe. Only 3 quick set-ups needed for making 3½" and 4" bends.

And, *you can't miss* with these Blackhawk sales advantages. Modern electric-powered hydraulic pump models pay for themselves *in 35 bends!* And these Blackhawks save you up to 75% over cost of manufactured ells!

Stock — sell — profit like never before — with these feature-crammed Blackhawks! Sell the *only complete bender line* — for ½" - 2" thin-wall conduit — ½" - 4" rigid conduit and pipe. Call your Blackhawk man today for complete profit details!

New 3" and 4" featherweight benders

FOR BENDING UP TO 3" PIPE
S-139 assortment with electric-powered hydraulic pump — or S-138 assortment with hydraulic hand pump. Both for 1¼, 1½, 2, 2½, and 3" diameters.

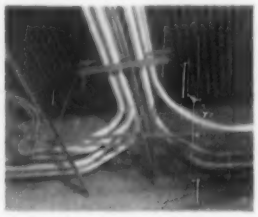
FOR BENDING UP TO 4" PIPE
Model S-140 assortment with electric-powered hydraulic pump. For 1¼, 1½, 2, 2½, 3, 3½ and 4" diameters.

FOR BENDING UP TO 4" PIPE
S-137 assortment with P-85 hydraulic hand pump . . . for 1¼, 1½, 2, 2½, 3, 3½ and 4" diameters.

Exclusive work-saving BLACKHAWK features

REMOVABLE TOP PLATE . . . "LOCK-ON" SHOES — No threading of shoes on ram — simply place them in position and insert lock pin. Pipe is quickly positioned from above rather than "muscled-in" from side. Top plate has snap-action, quick-lock bolt.

"OPTIK-ANGLE" GAUGE — Stops guesswork and time-wasting measuring in controlling degree of bend. The exact angle of bend is constantly in view. Gauge is mounted right on bender.



WHOPPING 77% SAVED ON BENDS! Dietz Electric Co. project foreman says, "on our last job we saved more than $2,000.00 compared to cost of manufactured ells. Blackhawk S-139 will be our production bender from now on."

Aluminum Alloy Frame and Shoes . . . Strength with Light Weight!

Rigid and Strong — yet surprisingly light weight — means greater portability, easier assembly on bench, floor, makes overhead bending a cinch. Smooth action S-139 turns out uniform factory-like bends — makes big savings in time and materials compared to manufactured bends.
The new Blackhawk is by far the easiest to use . . . fastest bender on the market today. Keeps electrician crews happy too!

THE BLACKHAWK MAN WANTS TO SEE YOU! PHONE HIM AT MILWAUKEE ORCHARD 1-4000 EXT. 77

BLACKHAWK bends prove BLACKHAWK'S best!

BLACKHAWK

BLACKHAWK MFG. CO. DEPT. P-4427, MILWAUKEE 46, WISCONSIN

"Porta-Power"

Hydraulic Pipe Benders

Hydraulic Knock-Out Punches

Hydraulic Jacks thru 100-tons

Sink your teeth into real profits

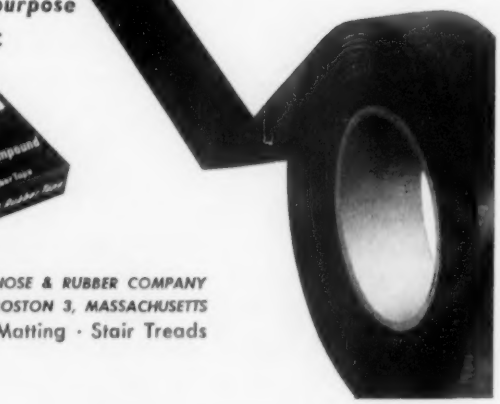
Bull Dog *Tape*

BULL DOG assures you solid profits because the famous BULL DOG name gives you fast turnover. BULL DOG Tape delivers thoroughbred performance . . . sticks tight and stays tight. Provides perfect electrical insulation. Dozens of other uses around shop and home build repeat sales. Complete line in smart packages that keep stock fresh and new.

Sold only through verified wholesalers

There's a BULL DOG TAPE for every purpose

FRICTION • RUBBER • PLASTIC



Another quality product of

BOSTON *BOSTON WOVEN HOSE & RUBBER COMPANY*
BOSTON 3, MASSACHUSETTS

Also manufacturers of Garden Hose · Nozzles · Matting · Stair Treads

ADVANCE

Offers The World's Most Complete Line of Quality Fluorescent Lamp Ballasts

Through outstanding engineering developments and modern manufacturing facilities, ADVANCE TRANSFORMER COMPANY has become the world's largest manufacturer devoted exclusively to the production of quality fluorescent lamp ballasts. These precision built, power regulating instruments supply exacting amounts of electrical energy for the efficient operation of all fluorescent lamps and are aptly called "THE HEART OF THE LIGHTING INDUSTRY."

Continuing research and constant new developments in both engineering and manufacturing divisions have made possible the introduction of many new ballasts with exclusive patented features. Thus, ADVANCE provides lighting equipment manufacturers, designers, architects, engineers, contractors and other fluorescent lamp ballast users the world's most extensive line of fluorescent lamp ballasts. When you use ADVANCE, there is a ballast for every specific purpose, never a need to compromise.

ADVANCE ballasts are listed by Underwriters' Laboratories, Inc., meet the Canadian Standards Association requirements and many meet or exceed Certified Ballast Manufacturers' specifications. Specify ADVANCE to be sure to get the ballasts with the "plus factors" that have built the world's largest company devoted exclusively to the manufacture of fluorescent lamp ballasts.

The Advance Transformer Company will replace, at no charge, any ADVANCE fluorescent lamp ballast which becomes inoperative within two years from date of manufacture, provided the conditions of ballast operation have conformed to the company's recommendations and the inoperative ballast is returned to an authorized ADVANCE Service-Stocking Distributor.

For anyone who manufactures, specifies, installs or uses fluorescent lighting, ADVANCE TRANSFORMER COMPANY has prepared helpful literature which they will gladly send without cost or obligation.

Fluorescent Lamp Ballast Buyer's Guide

This eight-page brochure gives data on the world's most complete line of Fluorescent Lamp Ballasts. It includes specifications, wattage, watt loss, circuit voltage, dimensions, weight, etc. This brochure is an invaluable aid for specifiers and users of fluorescent lamp ballasts.

Fluorescent Lamp Ballast Cross Reference Guide

This helpful guide lists many popular ballasts by catalog number and the ADVANCE ballast that should be used whenever ballast replacement becomes necessary. It is an invaluable reference chart that saves time and money for all users of fluorescent lamp ballasts.

Service-Stocking Distributor Plan and List of Distributors

This is a six-page color brochure that lists, by city and state, more than 550 distributors who carry a stock of ADVANCE Fluorescent Lamp Ballasts, to provide immediate replacement service for *ballasts of any make* that become inoperative.

You may receive a copy of one or all of these brochures by writing ADVANCE TRANSFORMER COMPANY, Marketing Division, 2950 North Western Avenue, Chicago 18, Illinois.

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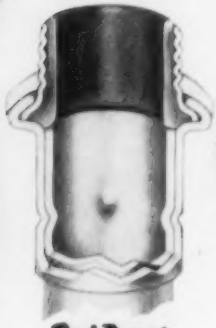
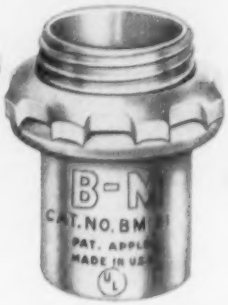
B-M

the original concrete-tight **INDENTER FITTINGS** *for E.M.T.*

Red Throat Insulated Connector



Red Throat Cross section



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Cutter for ½, ¾ and 1" E.M.T.

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"BM" #607
½" Indenter

"BM" #600
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Briegel Rain-Tight E.M.T. Compression Fittings

SIZES FROM
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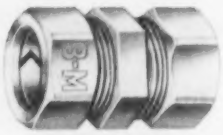

SIZES FROM
½" to 2"

SIZES
½", ¾", 1"

SIZES
½", ¾", 1", 1¼"

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Crescent Electric Sales Co.
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Phone: Albany 2-2600

R. L. Cunningham Electric Co.
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Philadelphia 47, Pennsylvania
Phone: Lombard 3-3660 & 3-3109

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Richmond 20, Virginia
Phone: 4-2273

Curtis Sales Corporation
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Shaker Heights 22, Ohio
Phone: Skyline 2-0225

Herbert L. Jones
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Phone: Linden 1-6684

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Phone: Elgin 8071

Rutkin Electrical Sales Co.
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Valkus-Kissel
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W. W. Wheat & Son
2219 4th Avenue
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Phone: Seneca 6222

Arnold J. Young Co.
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All B-M Indenter Fittings are U.L. Approved as concrete-tight and all Compression Fittings as rain-tight as well as for general use (File Card E10863). Also comply With Federal Specifications W-F-406.

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SOLD ONLY THROUGH ELECTRICAL WHOLESALERS

See how J-M DUTCH BRAND tells and sells your customers in your Prime Markets

Your customers are being introduced to a new, fact-packed sales booklet on Johns-Manville Dutch Brand's "BIG FOUR" electrical tapes through this ad, which is appearing in leading trade publications. This sales booklet is loaded with product information, ideas and applications. It dramatically illustrates the quality, features and versatility of Dutch Brand tapes. You'll find this booklet a valuable aid in clinching sales. Now's the time to get behind the BIG PUSH for the "BIG FOUR" . . . if you do not have your copy, send for it now!

SPREAD THIS NEWS

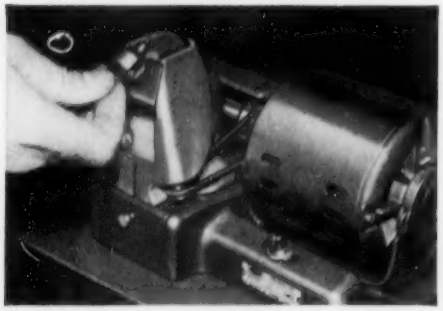
...and bring back a bagful of orders!

NEW WIRE STRIPPERS

from IDEAL

End the "Headaches" of Stripping Film Type Insulation

High-speed stripping of film type insulation has given many of your OEM and other customers a bad time. Demonstrate to these folks how neatly these new IDEAL Wire Strippers solve their problem—on "Formvar", "Formex", Nylon, Teflon or any other film-type insulation. It takes just a few moments to show 'em—and come back with an order! This is juicy new business—and the field's wide open for you because there's nothing else even close to these strippers on the job. Get started *now*—by getting your own order in today!



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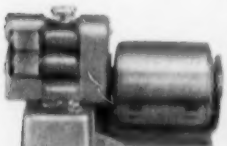
New high-speed bench model for film-insulated fine wire. Twin fibre-glass cones remove every known type of film insulation instantly, from AWG No. 50 to No. 30 wire, without damage to wires or parts. One pair of cones does every job. Other models include hand-held model and heavier duty twin cylinder bench type.



Compact Twin-Cylinder Bench Type—Strips AWG No. 50 to No. 25 wires.

Light weight Hand-Type unit strips wire to within 1/8" of coil.

DON'T FORGET THE REST OF THE IDEAL PRODUCTION STRIPPER LINE — THE BROADEST IN THE INDUSTRY, WITH STRIPPERS FOR EVERY KIND OF JOB.

TEFLON HANDSTRIPPER

Designed exclusively to make stripping of Teflon insulated wire, sizes No. 10 to 26, easy and quick. Unique features include adjustable length of strip and plastic wire stop. Nothing else like it.

IDEAL SUPPLIES A COMPLETE RANGE OF OTHER HAND-TYPE STRIPPERS IN THE FAMOUS "STRIPMASTER" AND "E-Z" MODELS. IT PAYS TO MAKE IDEAL YOUR SOURCE FOR EVERY STRIPPING NEED!

SOLD THROUGH AMERICA'S LEADING DISTRIBUTORS

IDEAL

IDEAL INDUSTRIES, Inc.

1047-B Park Avenue, Sycamore, Illinois

The most beautiful money in the world... *is made for you by* Honeylite !

HONEYLITE *combines maximum efficiency with maximum beauty.*

HONEYLITE *is easier to install.*

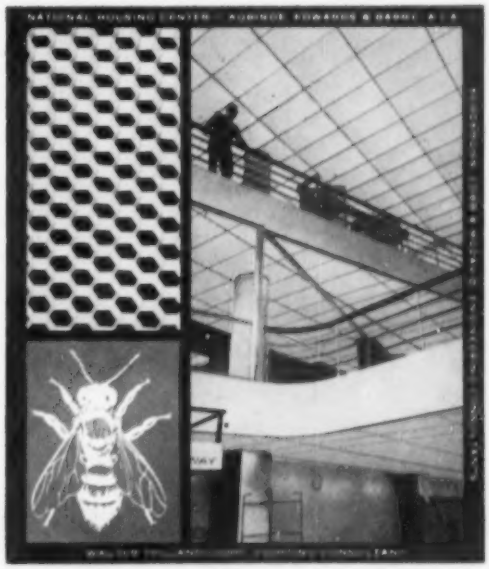
HONEYLITE *is suitable for every application. UL approved.*

Used in full ceiling lighting, in recessed troffers and in all types of lighting fixtures, HONEYLITE transmits the most light with the lowest surface brightness.

HONEYLITE may be used in all types of T-bar suspension systems. Because of its low weight (2 oz. per sq. ft.) and inherent acoustical properties, HONEYLITE requires a far less complicated suspension system than any other light diffusing material.

HONEYLITE can be incorporated in any lighting installation — suspended louvreall ceilings, troffer diffusers, industrial and commercial fixtures.

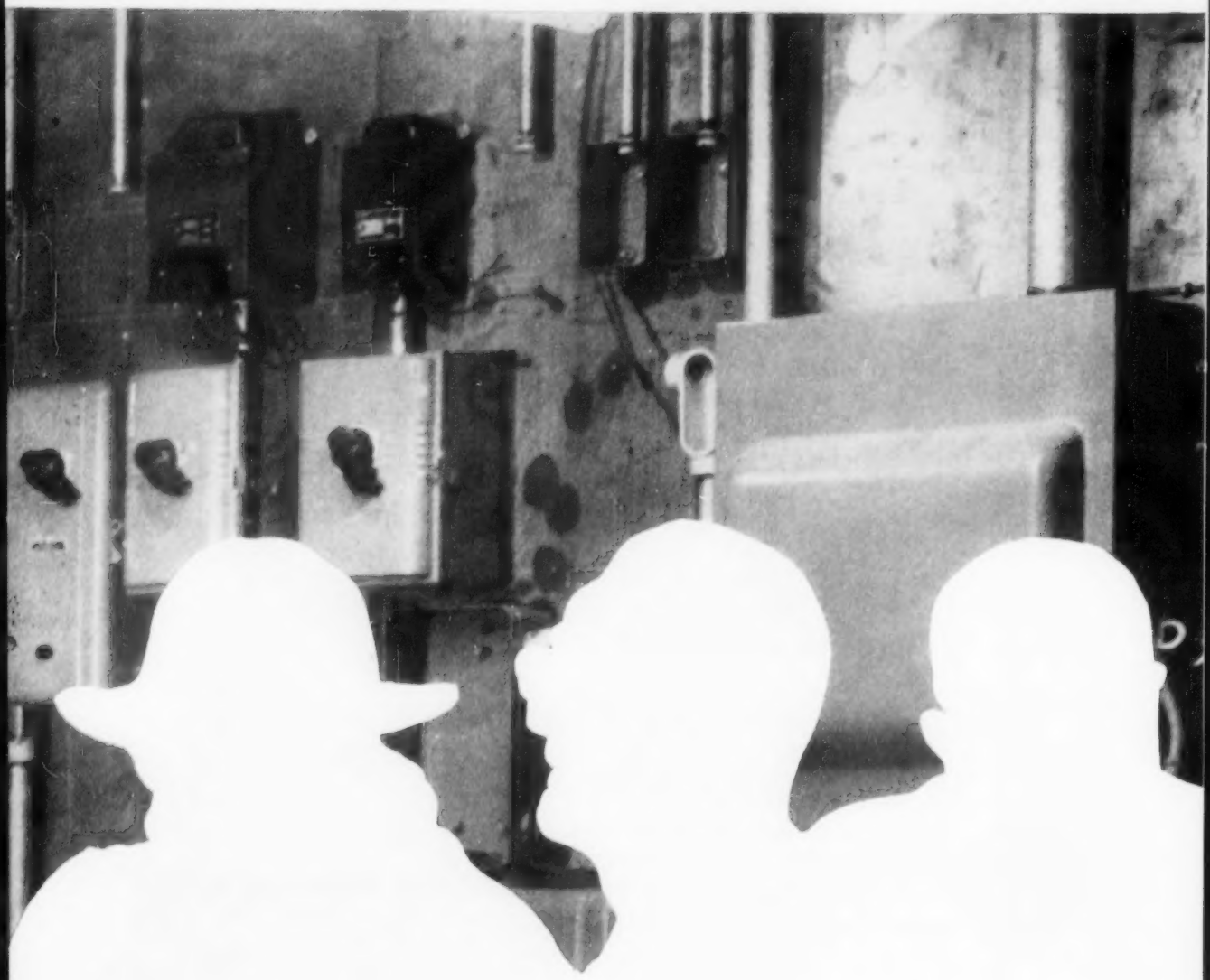
For price lists and detailed information see your local distributor or write to Dept. EC, Hexcel Products, Inc., 951-61st Street, Oakland 8, California.



HONEYLITE*

LIGHT-DIFFUSING ALUMINUM HONEYCOMB

A development of HEXCEL PRODUCTS INC.



To sell Electrical products . . .

you've got to sell Electrical Men

THE ELECTRICAL CONTRACTOR

THE CONSULTING ELECTRICAL ENGINEER

THE PLANT ELECTRICAL ENGINEER

Many a "seller" has been outfoxed trying to nail down one single dominant influence who specifies and buys for electrical construction and maintenance. You can't do it! There isn't just one . . . because electrical equipment is *team-bought*. You've got to isolate and sell all *three* men. Buyers such as . . .

Consulting Engineer Walter G. Bayha, who *designs* electrical systems . . .

Electrical Contractor George W. Reinke, who *installs* electrical systems . . .

Plant Electrical Engineer Elmer Helmsdorff, who *operates and maintains* electrical systems . . .

Each of these key electrical buyers subscribes to the identical business paper, Electrical Construction and Maintenance. You could go through the cards of thousands of buyers and find them teaming up in this same three-way combination.

They're the personalized identification of the 33,500 men who read this one magazine. They're the living, breathing, buying image of the team you have to sell . . . *consulting electrical engineer, electrical contractor* and *plant electrical engineer*. El. C & M wraps all three up in the only magazine that integrates all their professional and purchasing interests . . . and when it does, it puts a $4-billion-a-year electrical products market right on your doorstep!

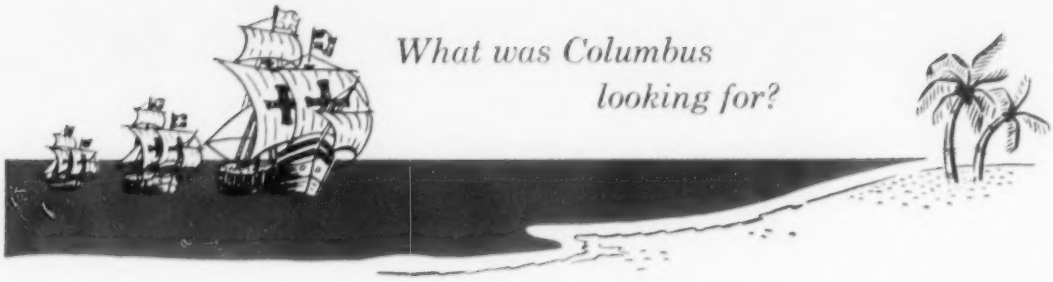
Plant Electrical Engineer Elmer Helmsdorff, Chief Electrician at New Haven's C. Cowles & Company says, "Electrical Construction and Maintenance is very important to me. It keeps me up to date on the market and the field. It's loaded with labor saving, cost saving ideas."

Consulting Electrical Engineer Walter G. Bayha, Partner in San Francisco's Bayha, Weir and Finato says, "El. C. & M. is my best source for up-to-date information on outstanding electrical jobs throughout the country. An inspection trip via your magazine tells me as much as going to see a job in person."

Electrical Contractor George W. Reinke, owner of Chicago's Reinke Electric Co. says, "Electrical Construction and Maintenance keeps us abreast of changing times. Your articles on methods used to execute unusual jobs help simplify our own problems. Articles on estimating are right in the groove."

330 West 42nd St., New York 36, N. Y. A McGraw-Hill Publication ABC-ABP

ELECTRICAL CONSTRUCTION AND MAINTENANCE



You'll find what you're looking for . . . with

Columbus* BRAND CONDUIT FITTINGS

The right conduit fittings make a big difference in the quality of finished jobs . . . and in installation time. That's why we're making it easier to identify Conduit of Columbus fittings.

There's no doubt about it . . . you can't beat Conduit of Columbus fittings for fast, easy, longer-lasting installations.

* *For years the name "Conduit of Columbus" has been the standard of leadership in conduit fittings. To positively identify this quality, specify the brand name "Columbus" conduit fittings. Ask for them by name.*

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LOOK FOR THIS LABEL WHEN YOU BUY FITTINGS.

SOLD ONLY THROUGH RECOGNIZED WHOLESALERS.

Conduit

CONDUIT PIPE PRODUCTS CO., OF COLUMBUS, OHIO

PIPE COUPLINGS • PIPE NIPPLES • ELBOWS, RIGID & E. M. T.
RUNNING THREAD • GOOSENECKS • WALL PLATES

Pencil-pusher or Pro?

In many eyes, the post-WWII wholesale salesman is somewhat of a cream-puff, a soft creature spoiled by lush times. In no appraisal we have heard or read has he been accorded the stature of his pre-war counterpart ("when salesmen were salesman"). His efforts have been summed up by the word, "order-taker"— as if pushing a pencil were his only contribution toward moving mountains of electrical goods during the last decade. In a seemingly endless era of plentiful business, the outside salesman is increasingly viewed as an anachronism, to be replaced if possible by a self-mailing order form or a trained monkey.

We take exception to such evaluations. An analysis that depreciates the wholesale salesman-1957 model overlooks the hard facts of selling today. The outside salesman has been getting his lumps these last years. For every big order available in his territory, there have been innumerable "takers"—each with a pencil-sharpener in his pocket. All of his worthwhile accounts have been price-propositioned by legions of sharp-shooting competitors. The mails have been full of bargain offerings from brokers with unbeatable prices. And more than a few manufacturers' men, to drum up demand for their products, have sold him down the river by leaving price sheets or quoting cut-prices to his customers.

Caught in such a maelstrom of price competition, the salesman has had to fight to stay afloat. Unfortunately, this has often meant meeting price with price. But repeated bumps and bruises have also stimulated a healthy reaction. Many salesmen have dusted off the concept of Service, and put its catechism to heart. Unquestionably, the salesman today is better able to present his firm's functions than was he or his predecessor, say, five years ago. And properly presented, Service is still the strongest selling point around—despite the unparalleled price-consciousness that customers exhibit today.

In between the hard knocks, creative salesmen have sought other ways to minimize the influence of price. One of the most effective means to this end is the acquisition of more technical know-how. The basic ingredients are a *detailed* understanding of electrical products, how they operate and how they may be applied; an ability to read electrical plans and comprehend the installation story they tell; a familiarity with the National Electrical Code and local ordinances. When acquired, technical know-how adds a new facet to Service and helps put price in a different perspective (*page 66*).

Another constructive step that creative salesmen—guided by realistic management—are taking is to concentrate on commodities less subject to price-cutting. Sometimes it means pioneering the market development of new or "sleeper" products. But the investment of sales effort in this direction often pays big dividends (*page 70*).

There are other bits of evidence that today's salesman is becoming more of a pro. His problems are different from his pre-war counterpart's; consequently, his solutions must be, too. So don't sell him short. His challenge this year is greater than ever. Electrical manufacturers expect to produce new mountains of goods (*page 99*) to meet expected demand. Most of these products will reach the point of consumption as a result of the orders he writes.

ELECTRICAL WHOLESALING re-dedicates its efforts to help the salesman move these goods—at a fair price.

George Jannsen Muller

EDITOR

ELECTRICAL WHOLESALING

FEBRUARY · 1957

Technical Know-how: Sure Key To Profitable Sales

By Robert S. Bush

A TECHNICAL background is not essential in the electrical wholesaling business, but it sure does help to influence customers and make those profit figures grow, believes Tony McHugh, salesman for Benfield Electrical Supply Co., White Plains, N. Y.

And he should know. McHugh is an electrical engineer, and has found his technical background invaluable as a selling point to present and prospective customers.

• **Obtains New Customers**—McHugh says his know-how has proved particularly useful in obtaining and developing new accounts.

When making "cold" calls, he explains in detail his background and attempts to show how valuable it can be in laying out jobs, reading blueprints and making recommendations for electrical installations. And he stresses that a customer can rely on his knowledge of the engineering phases of electrical work.

McHugh explains that technical assistance makes for a closer relationship with the customer. He has found that customers rely on his help and accept his recommendations and material estimates on jobs—small or large.

As for competing with his contractor customers, the salesman explains he has never taken business away from any of them.

"And I never will," he adds. "The contractor—especially the small one—is important to us. He is not only our bread and butter, but because he is small, he is unable to hire engineers, and needs the technical advice we can give him. We will always protect him on sales."

EXPLAINING technical details to contractor is part of salesman's regular job. Here, Tony McHugh (center), goes over blueprints with two electricians who are installing electrical equipment in a 150-unit apartment project. McHugh sold supplies here.

• **Consults Contractor** — McHugh never goes to a job site to make a sale without taking the contractor with him or consulting him about the job. He explains that he does not want the contractor to think he is attempting to take business away from him.

One contractor, who has specialized in house wiring, has found McHugh's efforts helpful. He says it has given him an opportunity to branch out in the more profitable industrial field.

• **Follows Plan**—In assisting a prospect with a major job, McHugh usually follows this four-point program:

1. Gets specifications from the utility to determine point of service entry.
2. Determines the best type and size of service after studying loads of buildings.
3. Selects the main distribution equipment to be used, figures main and sub feeders, odd power distribution, panels and lighting.
4. Explains in detail to the customer the major pieces of equipment and functions.

The salesman explains that prices are about the same everywhere. That is why he stresses his technical background in showing how it can play an essential part in helping to solve problems for customers, thus increasing the chances of bringing in more profits through more orders. He adds that even though a prospect may not purchase supplies from him, the help he provides promotes goodwill.

McHugh says that through technical assistance, much price-cutting talk with a customer is eliminated.

"A fair price—not a premium—is all we ask for our service. Because of our technical assistance, the customer knows our recommendations are correct and doesn't have an edge in discussing price.

"It's hard to talk around nothing. We have something—technical know-how. And it speaks for itself. The profits say so."

Five Quick Examples of Where McHugh's Know-how Paid Off . .

A contractor prospect, who didn't know how to figure cost of installation of a two-phase, three-wire motor, asked McHugh for advice and assistance. Resulted in sale for McHugh, who used his background as wedge, and has been selling to customer ever since.

Electrical contractor's faith in McHugh's engineering ability was important step in assignment to figure electrical needs of a 150-unit apartment project. Result: Benfield Electric received order for service disconnect switches, wireways to meter banks, fuses to risers for each apartment and riser panels.

The ability to read plans plus $225 saving for one customer are bringing in repeat business. On one construction job, heating and ventilating plans called for magnetic starters on all motors; the electrical engineer's plans called for no starters. Confused customer asked McHugh what he thought. After looking at both sets of plans McHugh suggested that magnetic starters were not essential; in view of the requirements, they would be 'gold-plating' the job. Instead, he suggested manual starters.

Stressing engineering background to personnel at Playland Amusement Park, Rye, N. Y., won sale for McHugh. Work involved high voltage application for street lighting in which new feeder was installed to relieve load of existing one.

Explaining technical details of electrical plans to owners of new plant for machine and tool company won order for salesman. McHugh layed out job, sold 800-amp service equipment, main distribution panel and cable for 3½-in conduits feeding switch.

Technical Know-how Started This

SEVERAL years ago, McHugh attempted unsuccessfully for about two months to get business from EMCO Porcelain Enamel Co., Inc., of Port Chester, N.Y. Only promises were forthcoming.

Eventually, because plant officials knew of his technical background, the salesman was asked to estimate needs for an electrical system to feed a new line of welders.

• **Goes to Work**—McHugh immediately obtained specifications from Consolidated Edison Co. After studying these, he worked with plant personnel, the electrical contractor and the manufacturer's welder expert in laying out the project.

He says that voltage drop was the big problem involved; after considering alternate methods, he suggested 1,350-amp low reactance weatherproof feeder duct on the outside of the building to provide good voltage regulation.

• **Gets Order**—The suggestion was approved and the initial order for Benfield Electric was about $5,000.

A forthcoming job at EMCO on which the salesman is working involves a 600-amp service for a second plant building.

PART OF INSTALLATION at EMCO Porcelain Enamel Co., Inc., Port Chester, N. Y., is discussed by plant superintendent Bernard Katinsley (left) and salesman. This consisted of bus duct to feed new line of welders.

ONE ASPECT of inside installation at EMCO included this 1,600-amp pressure switch, which was recommended by McHugh. Katinsley says he is satisfied with equipment.

ANOTHER INSIDE installation included this 600-amp welder disconnect switch. McHugh layed out entire job at EMCO, and as a result has been called in on maintenance problems since.

Series of Sales

FIRST SALE by McHugh led to others at EMCO. Here, he and Katinsley go over materials estimate for future project involving a 600-amp service for a second plant building.

FOLLOWING UP discussions of estimates for electrical equipment, superintendent and salesman visit site to check for best location for installation of service equipment.

But he's still a typical electrical distributor's salesman handling such duties as . . .

CARRYING SAMPLES for demonstrations to customers is important duty. Contractor John O'Brien was interested in this rain-tight safety switch box.

ASSISTING ELECTRICIAN at job site is a frequent service rendered by McHugh. Anthony Cucinell marks spot where service equipment will be installed.

DELIVERING SUPPLIES to customers is part of salesman's regular duties. Contractor Herman Metz watches as McHugh checks list of items he delivered.

They Proved Creative Selling

By Durward Humes

WHAT THEY DID . . .

TWO YEARS AGO, Hawkins Electric Co. persuaded the manufacturer to let it stock and sell aluminum conduit—fully convinced that it could do a sales pioneering job with this line.

Last year, the Chicago distributing firm sold $200,000 worth of the conduit. This figure doesn't include Hawkins' volume from sales of accessory aluminum fittings. And meantime, the firm's regular conduit sales have continued to increase.

Credit for this record goes to president R. R. Hill, who did the persuading, and Jack Miller, aluminum sales specialist, who has handled the sales missionary work (*photo at right*).

This success with what, in Hill's opinion, amounted to a "new product," wasn't instantaneous. It took hard

AND HOW THEY DID IT

1st Round: Education with

HAWKINS' first move was frankly exploratory. Ads announcing the new line were run on the Chicago Daily News business pages and in a number of Illinois commercial magazines. There were a few queries but nothing resembling an order.

Doubly sure then that much missionary and educational work was in order, Hill put specialist Miller on the project. Overnight, Miller became his own purchasing agent, advertising manager and one-man sales staff.

Miller's first step was to set up a direct mail campaign slanted toward the contractor. He figured that new construction was the natural place to break into the market, and that, to be most effective, the story would have to be spread far beyond the boundaries of Chicago. The result was two mailings, a month apart, to 1,000 midwestern contractors.

The first mailing announced the fact that Hawkins

2nd Round: Follow-up with

PERSONAL CALLS, once the direct mail was underway, were next in Miller's attack plan. This missionary work took in three general types of customers: those who had replied to the direct mail, those with the obvious special applications fitted to the line, and the range of Hawkins' regular accounts.

Miller relied heavily on the benefit story he had worked out for direct mail. To this, he added test installations—using one job to sell others. At Clark Oil & Refining Co., Blue Island, conduit was installed on a tower in an area contaminated by a hydrogen and high-octane fuel mixture. Miller sometimes uses it and similar installations as testimonial cases.

Most of his sales, at least in terms of poundage, naturally have involved large new industrial plants. These have ranged from meat processors to aluminum fabricating plants and utility stations. But there also have been sales to a variety of smaller plants for diverse uses.

Is Still Alive

work and a try with everything in the sales promotion book—advertising, direct mail, test installations and lots of personal sales calls.

To Hill, the main fact is that he and Miller looked until they found the right prescription:

- Local stocking. This was basic from the beginning, since production is irregular and there's upwards of an eight-week wait on factory orders. Few other firms stock the conduit.
- Sales specialist for a specialized product. More than day-to-day selling was required; education was the word for it. Hill's solution was to put a man on the line and to make him responsible for moving it. "This put the product across," he says.

How this worked out is told below.

HAWKINS' TEAM: Sales specialist Jack Miller (left) and President R. R. Hill, discussing future promotion plans.

ads, direct mailers

stocked the line. The second, Miller emphasizes, went much further. He designed it to overcome inertia and resistance by playing up, in one-two-three fashion, the product benefit story.

Contractor reaction was good. There were a number of orders (any one of which more than covered the cost of the mailings), plus many requests for additional information on the conduit and fittings. Miller feels this was a good starter.

Miller's direct mail efforts are continuing. He recently mailed a third sales letter, this one to industrials. Further mailings, possibly to specialized industries, are under consideration.

"I haven't had the time for adequate follow-up calls on the replies," Miller admits, "particularly those from out-of-town. But I'll keep expanding my calls. That's what makes direct mail pay off in full."

missionary calls

An example of Miller's efforts to broaden his product market was a sale for the Thornwood division housing development. All of the 350 $14,500-$16,000 units there will have 100-amp entrances, with 1¼" aluminum conduit service, sold to Harold Hensley (*see photo*) of Hensley Electric Co.

While he's a specialist, Miller is no loner. He works closely with the manufacturer, following up leads, and with other Hawkins salesmen, on their accounts. When there's a sale in the wind, he's handy with price sheets and selling points—and he's always available for a personal call.

Miller stresses the firm's local stock and the service he himself furnishes for the customer, from help on installation problems to responsibility for all orders. Both he and Hill contend that local conduit stock, while important, is no substitute for interest in the customer's problems and help in solving them.

"THERE'S lots of talk about distributors sitting back and letting manufacturers do their sales development job for them," President Hill says. "We know this to be far from true—and here's a case in point.

"To us, this was a chance to get out in front with a product that might go places—if it had a real selling and educational effort behind it. There was hard work, and there was the promise of good profits."

This was Hill's thinking two years ago, and events since then have only strengthened this conviction. The irony is that such a persistent sales development job stemmed from an "accident."

- **Enthusiasm**—Hawkins' Decatur, Ill., branch noticed an Alcoa ad on the line and referred it to Hill. He in turn called on the manufacturer's Chicago office and talked with the product sales boss—who later told Hill: "In my 40 years in this business, I have never seen anyone so enthusiastic."

Hill admits to the enthusiasm. "In fact," he says, "I still have it. We saw a chance to do a missionary job. And looking back over the figures, I'd say that we are moving."

But Hill also admits that, once the project got underway, there was nothing accidental about it. He and Miller tried several approaches until they found one that worked.

- **Educator**—Miller, who is a veteran Hawkins salesman, says that the uniqueness of the project interested him, and still does. "It's more than sales or even promotion," he comments. "Actually, it's been a job of education—developing a new 'territory.' You have to spread a story to a variety of customers, all while meeting the usual resistance to a new product."

He feels one big reason for his achievement so far has been his responsibility for doing the job. Working with Hill, he has sold and he has advertised the line. Moreover, he has been in charge of keeping up stock—including accessories ranging from locknuts and straps to vapor-tight fittings. And he's interested now in aluminum wire, perhaps in harness with the conduit.

- **Where Now?**—"There's still a long way to go," Miller adds. "Lots of customers still haven't heard the story in detail—but they will, and soon."

"When you lose an order, it's a good bet you've failed to completely sell the customer."

Persistence-plus Pays Off

That's the lesson tyro Junior Stevens learns as seven other Pioneer Distributors' salesmen tell him why he shouldn't ring up no-sale too soon. Round table talk shows him there are many angles to a sale that require more perseverance

By Winston N. Coburn

"HEY, Junior! Bought a new car yet with your Community Shopping Center order?"

Junior looked a bit crestfallen as he answered Les Sprague, "Gee, I got beat out on that order—and just when I thought I had it made, too."

Les and the other salesmen attending Pioneer Distributors, Inc. monthly sales meeting made sympathetic comments. Then Junior continued bitterly, "Yeah, Cannon Electric—the contractor—kicked it over to another distributor and I figure someone's getting a cut. It smells to me."

Old Bob Davis seemed to rear up in his chair as he broke in. "Say young fellow—I thought I had you trained to never knock the customer or the competition. Now, are you sure you didn't slip up somewhere?"

The utility salesman, Ross Harding, chimed in. "Yeah, Junior, I've known old man Cannon a long time. I don't think he does business that way. Let me call him and get the inside story."

Ross, old Bob and Junior stepped out to phone and soon Ross was talking with Cannon Electric. Smiling, he replaced the receiver and turned to the tyro salesman.

"Junior, Cannon tells me that your prices were in line, but Eager Electric Supply offered more. They checked with him on the probable timetable for the job and obtained delivery commitments from all their suppliers."

"There—I knew it!" exclaimed old Bob. "Let that teach you a lesson, Junior. When you don't get an order, you'll almost always find that you failed to completely sell the customer."

They returned to the sales room with Junior still looking a little battered.

"Say, Bob, how do you other fellows keep an order from slipping?" he asked. "Sometimes when I call, the customer just isn't ready to make a deal. The next time I get around, someone has already made the kill. Gosh, I can't just move in and live with them!"

"You've got my suggestion already," answered the old-timer. "But let me explain a little more. When I said to sell the customer completely, I meant that you can't overlook some things you may ordinarily take for granted.

"Once, I worked my head off on an order, only to find my customer had put in a high bid on the job. Came to find out later, he didn't really want the job. His men and equipment were busy, but he had to make a token bid so he wouldn't offend an old business friend. He had no intention of buying the material.

"On an electric heating job, I tried to help a contractor, only to find that on the side he was telling the consumer that electric heating was too expensive and that he should use a fuel-type heating instead. That contractor wasn't sold on the method of doing the job.

"On another job, my contractor was low bidder based on estimates I helped him to prepare. But when he came to buy the materials, he purchased all the circuit breakers elsewhere because he was prejudiced against the brand specified. That customer wasn't sold on my product.

"Now, Junior—you just had a case where the customer wasn't given all the facts he needed to make a decision—

the decision to give you the order. Prices, terms and delivery are basic enough so we don't usually overlook them, but watch the other angles.

"Last, I might add that too often we take it for granted that a customer should know we want the order—after all the work we do to get it. But somehow, you have to **tell** many customers, "I want your order. Will you place it now?"

"You said it Bob!" laughed utility salesman Ross Harding. "But there is one thing you didn't say—'Don't ring up no-sale too soon!' Just when can you concede an order is lost? Certainly not when the customer tells you he's decided to place it with a rival. That's your chance—right then—to review the sale with him to make sure he's considered every factor.

"I don't give up an order when they tell me it's already been placed. Often the competition fails to make good on their promises. Half-way through a job, a customer may be in the mood to cancel the order and turn to you. I even check back on lost sales that have been completed to get the customer's reaction and sometimes I find the basis for nailing down the next order there. Whenever I run into the price situation, I make sure the customer is comparing prices on an even basis. Don't take it for granted that you have been undersold."

Watch for Breaks

"Don't take it for granted, either, that you can't sell the new or unusual item. Junior," suggested Les Sprague, a contractor specialist. "For years we have bid hopelessly on auxiliary power plants. This last summer, after a bad storm, a contractor wanted prices on a unit for a summer resort hotel. I telephoned the office right from the customer's place.

"In a few days he had completed information from Barry Brown including the dope on throw-over switches and accessories. Barry included a good sales letter that asked the customer to call him collect if our firm could help him further. The contractor got right on the ball before that hotel forgot about that 24-hour power failure and I had a nice juicy order."

"Thanks for the bouquet, Les," responded inside salesman Barry Brown. "Guess, I'm more used to bricks. Remember, my job is to back-up you fellows out in the field. Give me a lead on things your customers show an interest in. I can follow through when they come in for a pick-up. Sometimes, you can sell them things across the counter that they won't buy on a salesman's order. In Junior's case, I could have called the architect and found out the beginning and completion deadlines.

Count On Inside Help

"On prices, give me a chance to call the supplier and get the latest and best prices. On delivery, let me get you delivery promises. We can call a traffic service that will give us the best possible routing on a special shipment. In emergencies, I have contact with other wholesalers who are always glad to help out on a return favor basis. Never give up on a sale if you think there is any way I can help you."

"You fellows are just painting rosy pictures," scoffed Junior. "Why, you make it sound as though you couldn't miss."

"Pictures!" Tom Ellery, the southern territory man, came to life. "Say, did I ever show you my rogues gallery? Look!" He dumped a sheaf of photos from his brief case. "You know, I'm sort of a camera fan. Well, I started carrying around a cheap camera with a flash attachment. The customers are always flattered when you want to take a picture of one of their jobs, but here is what I do with them.

"See this one of a remote control wiring job. Well I used to take a contractor over to see a job all installed before I could get him interested in using the stuff. Now, on items that are new to a customer, I use pictures. He knows that other contractors are using the merchandise. This one pair of 'before and after' pictures have sold a couple of modernizing jobs. This way you can pretty nearly show a customer how his job will look when it is completed. You know, they say a picture is worth a thousand words."

Ask About Financing

Gray-haired Mr. Taggart, the treasurer, had arrived in time to hear the conversation and he added, "I know that I talk to you so much about checking a customer's credit before you promise an order that you must think of me as a negative element in sales. When that customer is delaying in giving you an order, do you ever think it's possible he is concerned about financing the job?

"Usually, if he is concerned, he isn't going to mention that fact. He will stall you off with some other objection. Why don't you ask him if he would like to discuss financing the sale or the job with your treasurer? I have tried to make a personal call on many of our customers. What better time could there be, than when I am needed? I can help work out arrangements that are sound. Believe me it's better business to make credit arrangements first than have to liquidate a customer gone off the deep end."

C. A. Martin, the sales manager, had not hurried the meeting along. He was interested in the suggestions too, but now that the pace lagged, he took over.

"Sorry men. We have a factory man waiting to present his line and we just can't keep him waiting. Before we go on, I do want to take just a moment to point out that there is a definite pattern to all the suggestions that you have offered.

Basic Rules Win Sales

"We always make fun of the basic rules of salesmanship as applied to our type of selling, but just notice how they apply here. Bob outlined the need of completely selling the customer and the examples he offered showed that you must determine a customer's needs and his interests. He also said that you must ask for the order.

"Ross, I think your suggestion illustrates that we must always struggle to overcome the customer's objections even when the sale seems lost and that we must continue to ask for the order. We all know that to do this successfully, we must give the customers continued good service.

"Les, your story illustrates several points. First, determine a need. Second, gain the customer's attention. Third, act on it with a good selling job. And last, maintain his interest.

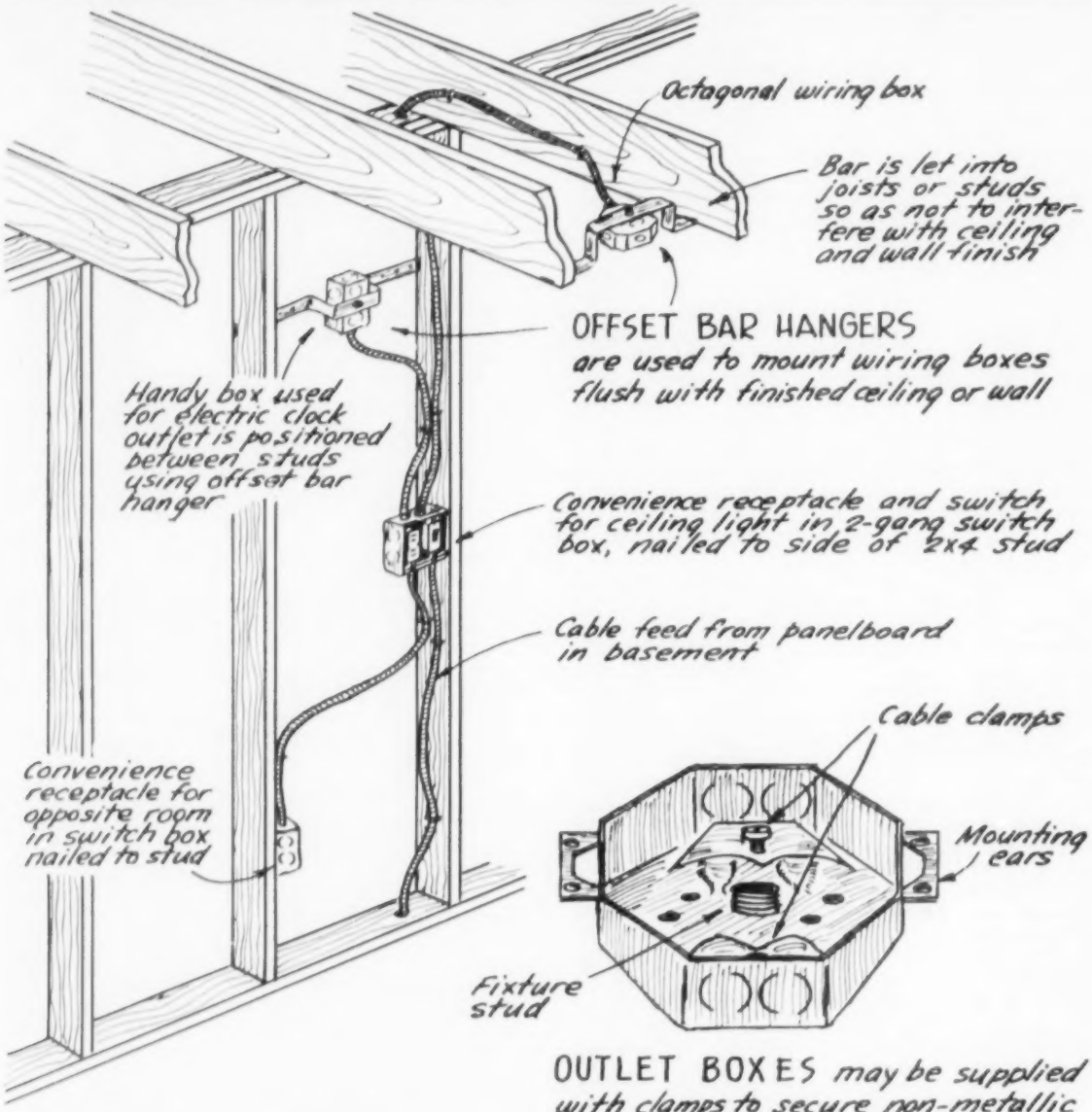
"Tom, your pictures can serve two purposes; they can gain the customer's attention, and they can be used to overcome an objection. They can be used in another way too—you can use them to help the customer identify himself with the product. You know—'This is the way **your** job will look, if you use **our** product.'

"Now Mr. Taggart was talking about a good basic step in selling—showing the customer that it is possible and profitable for him to give you the order **now.**

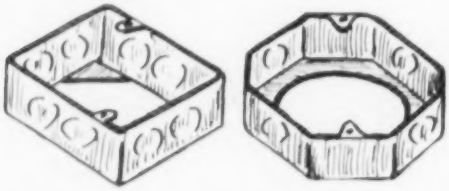
"Ross, I like that expression of yours—Don't ring up no-sale too soon. What do you think about it, Stevens?"

Junior Stevens shrugged sheepishly, as he answered, "Well it looks to me like I've got to act more like a bulldog and less like a whipped dog."

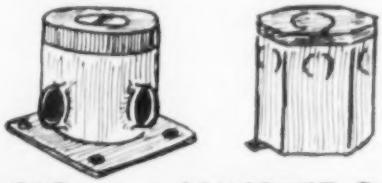
COMING NEXT: How to probe for that first chink in a tough customer's armor.



OUTLET BOXES may be supplied with clamps to secure non-metallic or armored cable, attached ears for mounting the box, or center studs for fixture mounting



OUTLET-BOX EXTENSION RINGS for square and octagonal boxes are available to increase the box depth either 1 1/2 or 2 1/8 inches



FLOOR and CONCRETE BOXES provide access to circuits in floor or ceiling for fixtures and receptacles

Wiring Devices—IV

By W. J. Novak and J. F. McPartland

IN ADDITION to outlet boxes, electric wiring systems make use of other types of boxes, as follows:

Sectional Switch Boxes—These boxes are used in concealed wiring systems in which the boxes are not embedded in masonry.

Sectional boxes have removable sides to allow ganging of a number of boxes side-by-side to accommodate several wiring devices at a single location, in a compact housing. These boxes do not require covers; they accommodate standard flush wiring devices with standard flush plates.

The boxes have a number of conduit knockouts and may have internal clamps for holding armored cable or non-metallic sheathed cable.

Utility Boxes—These boxes are designed for use in exposed conduit wiring systems. They have knockouts in bottom and sides to accommodate a variety of conduit runs.

Flush Plates

Flush plates are the finishing covers used on flush wiring devices in concealed wiring installations. Flush plates have the necessary small cutouts to accommodate toggle handles, pilot lights, convenience receptacles. They give the installation a neat appearance.

Flush plates are made in one-, two- and three-gang sizes—in various combinations of openings—to meet the requirements of almost any combination of devices.

They are made of bakelite, plastic, steel, enameled metal, brass and other materials for special applications.

Box Supports

To mount and support various types of outlet boxes and wiring boxes in the many types of construction used today, a number of box support devices are available.

Mounting straps of flat steel stock are made in a number of types and sizes with and without attached fixture studs. Made in different lengths, depending upon the type of box to be supported, typical straps or bar hangers are 18-, 21-, and 24-in long, with holes at both ends of the bars for nailing to joists or studs.

Units without fixture studs have slots in their middle sections to accommodate stove bolts holding boxes. These are known as box cleat hangers. Some straps are straight; others, known as offset hangers, have offset sections in their middle to accommodate mounting boxes of different depths so that boxes may be recessed in ceilings or walls.

A variety of types of mounting straps are made to meet all job conditions. Boxes and strap hangers are also available in preassembled combinations of correct hangers for the different boxes. Assemblies are made for armored cable, non-metallic sheathed cable, thinwall and rigid conduit systems.

Other types of box support devices include footed box support bars for wall mounting boxes by attaching the box by screws through its side to a slot in the vertical support bar.

There are also special supports for mounting switch boxes to beaverboard or sheetrock or holding boxes installed in walls of old houses where no other support can be obtained for the box, and flat bar hangers for mounting octagonal boxes in hung ceilings.

Insulated Devices

A wide range of standard wiring boxes, covers and plates are made of insulating materials—like porcelain, bakelite, etc.—to provide insulated wiring systems of standard concealed knob and tube wiring, open cleat wiring or non-metallic sheathed cable.

Grounding of device enclosures is not required because the box material is an insulator. Providing ease of installation and economy, these units assure safety to personnel if a hot conductor should ground to the device.

Use of metallic boxes with non-metallic wiring systems and without a grounding conductor carried to the boxes and connected to them presents the hazard of shock if a hot conductor should become common to the box.

Other Boxes

In addition to the boxes described, there are other boxes for special applications. Typical of these is the floor box. Floor boxes are made to accommodate plug receptacles, to provide for signal circuit outlets and to serve as junction boxes for conduit wiring systems embedded in concrete floors or concealed in wood floors. Units are made in adjustable and non-adjustable types.

The adjustable boxes have tops which can be adjusted by means of leveling screws over a range of about ½-in for vertical positioning of the unit to meet the conditions of the floor. These units can also be adjusted for about 15° of angular positioning. Units are made in single and gang outlet types.

Another type of wiring box is the door switch box, made to provide mounting of switches in door jams.

Pull boxes and junction boxes are used in conduit raceway systems for a number of reasons. Pull boxes, for instance, are used in long conduit runs which contain more than the allowable number of bends. The code limits the number of bends allowed in a conduit run, and the practical allowable number will depend upon the physical conditions which will allow conductors to be pulled into the conduit.

The length of the run, the size of the conduit and the number and types of conductors to be pulled will determine limits for bends.

Generally, two or three equivalent 90° bends represents a maximum between pulling points. Pull boxes permit pulling of conductors to the box and from the box to the next point of pull, and they permit ready change in direction of the conduit run. Such boxes should be long enough to provide adequate radius of bending for the conductors.

Junction boxes are similar to pull boxes and are used for the same general purposes—eliminating bends in a large number of parallel conduit runs, providing change of run direction, providing taps into conductors, providing for conduit transpositions, etc.

Pull and junction boxes are made in many sizes, with dimensions up to multiple feet and with wide varieties of sizes and locations of knockouts for connecting conduit. Such boxes are generally made of standard gauge sheet steel, with screw covers, but many cast iron boxes are made for heavy-duty applications.

Next Month: Wiring Devices—V

Inside Speedup—

1. With a 'Shortcut' Accounting System

UNIT INVOICE account eliminates posting and means that monthly billing can be handled by an adding machine. Above, Margaret Hamline drops a new invoice into the file. When it is paid, she will pull and mark it 'paid,' then put it in a pile to be held for completion of the monthly trial balance. Or it may be handled by means of appropriate partial payment, debt or credit notes. Final step (below) is to complete open item monthly statements on the adding machine. She also keeps brief credit histories on each account and is authorized to approve routine credit approvals. Since the switch to the unit invoice procedure, Loeffler's invoice processing and statement mailings are handled easier—and the bookkeeping machine is used only during heavy sales periods.

WHEN Loeffler Electric, Inc. put in its unit invoice accounting system, it sold a bookkeeping machine and relegated a bookkeeping-posting machine to the back room.

Changes at the Toledo, Ohio firm didn't stop there. Certain that inside efficiency is a never-ending goal, Loeffler literally threw out its old collection procedure. The new setup is simple, "personal" and, in the words of treasurer Minor Eyres, "has gotten our slow accounts in much faster than normal."

Both moves stemmed from the firm's conviction that while profits can only be made outside, they are often frittered away by wasted or misdirected effort inside. There was also the certainty that no package system could be imposed on a company without some adjustment to special needs and problems.

• **New Routine** — Invoice accounting at Loeffler up to two years ago was routine, not to mention time-consuming. Invoices and payments were posted and proofed in the traditional manner. There was a gradually increasing feeling that there must be an easier and better way.

Eyres, then new at his treasurer's job, thought that there was. He checked with business machinery manufacturers and came up with a Remington Rand system, which Loeffler adopted.

This accounting system is built around the unit idea, applying payments directly against outstanding invoices. The invoices are filed daily, each in the jacket for its account. When remittances are received, they are removed and stamped "paid." They are then filed separately until after the monthly trial balance, when they go into the customer's permanent file. Partial payment, debit and credit slips are used as well.

Monthly statements, showing only open items, are made up at Loeffler with an adding machine. The customer's copy shows charges by invoice number and date, plus all credits.

In this changeover, Loeffler reduced the accounts receivable staff from two clerks to one. Invoice processing, with the cutback in posting, is right up-to-date, and statements are handled without difficulty. What's more, the accounts receivable clerk has a variety of work, from typing to adding, and a variety of information available on the jackets. There's a credit history, allow-

Where It Counts

2. *With 'Personalized' Collections*

ing her to make routine credit authorizations, and signals to note which accounts require followup.

• **Bad Actors** — But treasurer Eyres felt that collections required additional attention.

"No neat system," he says, "can replace personal knowledge and attention. About one per cent or so of our accounts cause the 'collection problem.' While the accounts receivable department can handle the routine ones, we figured that it would be best to work out a more flexible system for the bad actors."

The result was Eyres "personal" collection procedure. No inflexible credit limit is set on the books; instead, in questionable cases, Eyres has the final decision. "You can't be inflexible in the wholesale business," he comments.

When a customer goes beyond his previous level of credit, the salesman on the account is asked why. Loeffler Electric, Eyres says, is completely with the salesman unless there's fresh evidence to the contrary.

Eyres applies his main effort to past due accounts. He keeps a complete card file on four categories of accounts: active ("We're keeping at them"); inactive ("They were behind until recently"); bad ("COD only"); and under investigation ("Our own checking, that is").

'PERSONAL' records of past due accounts is kept by treasurer Minor Eyres. He believes that different circumstances call for different methods.

It's the "active" past-due accounts that get the most attention—but in an orderly and personal fashion. Usually, unless there's a good reason to try some other procedure, it's a five-step proposition. The salesman calls and if he doesn't get a payment, he gets a promise. Then there's two self-mailing requests (*see below*) sent out in sequence, and finally a "quickie form" with space for an immediate reply. The last steps are personal and telephone calls from the salesmen and Eyres.

"With this setup," Eyres says, "we've done very well on collections. It's adaptable—yet it's simple."

COLLECTION procedure normally is five step process. (1) Reminder from salesman. (2) First self-mailing reminder on due date. (3) Second reminder (above, left) after 10-15 days. (4) "Quickie form," with space for immediate hand-written reply, sent after 25-30 days overdue. (5) Finally, registered letter and barrage of personal and telephone calls.

Designed to help you backstop customers on . . .

Article 210—Branch Circuits

Here are the facts behind two significant changes concerning receptacle outlets and some suggestions on how you might create better understanding of them in the field.

THE 1956 REVISION of the National Electrical Code presents two significant changes that concern the receptacle outlets required in a dwelling type of occupancy.

The first sentence of Section 2124-b has been revised to read as follows: "Section 2124-b. Dwelling Type Occupancies. In every kitchen, dining room, breakfast room, living room, parlor, library, den, sunroom, recreation room and bed room, one receptacle outlet shall be provided for every 12 linear feet or major fraction thereof of the total (gross) distance around the room as measured horizontally along the wall at the floor line."

The 1953 edition of the Code only required a receptacle outlet for every 20 linear feet. This provision first appeared in the 1937 edition of the Code approximately 20 years ago. It has—as a minimum standard—served a useful purpose, but it has become obsolete due to our constantly increasing electrical demands.

Reasons for Change

1. The 1951 Code increased the lighting load for dwelling occupancies from 2 to 3 watts per square foot of floor area. This 50 per cent increase took care of our feeders, services, and branch circuits, but no recognition was given to the outlets essential to serve our increasing electrical needs.

2. Most of our portable lamps and appliances are provided with 6-ft cords. This new 12-ft provision will permit an appliance to be connected without resort to cord extensions. It should minimize the occasion to use current taps.

3. The misuse of cords has been one of our major causes for electrical fires. This new Code provision will tend to minimize the misuse of cords and the resulting fire losses.

4. During the past 20 years, our residential wiring designs have been changed so that a large percentage of our lighting loads are served through receptacle outlets.

5. The 1956 Code, Section 2304, recommends a minimum 100 ampere, 3 wire service for dwelling occupancies, and many municipalities and electric utilities have made the recommendation mandatory by rules or regulations. As our service needs continue to increase, it is essential to increase our outlet capacity accordingly. We cannot safely serve additional loads, regardless of service size, unless we have adequate outlet capacity. This new Code provision follows the trend for larger services. It warrants our full-hearted support.

Field Reaction

Back in 1937 when the 20-ft provision first appeared, the speculative building contractor opposed it with the contention that the rule was instigated by the electrical industry—not on the basis of hazard, but solely in the interests of increased sales and installation costs at the expense of the public. Possibly similar reaction will appear during the coming year and all of us who are concerned should be in a position to counteract such a false concept of the intent of this rule.

The wholesaler salesman may play an important role in this respect through intimate contact with the electrical contractor, design engineer or electrician who deals with the building contractor. The significance of this rule, solely on the basis of hazard, should be clearly understood so that a logical presentation of the factors involved may be presented whenever the occasion arises.

Significance to Salesmen

In order to emphasize the importance of this new Code provision, we have endeavored to show by an example (*see right*) how the rule would apply to a typical dwelling occupancy. The example used is the same as covered in Chapter 10 of the Code, which covers a dwelling of 2,500 square feet. Many of our dwellings of today have considerably smaller floor areas but the ratio of 12 to 20 remains the same regardless of size.

All of us must remember that the new 12-ft provision is considered a minimum requirement and would not satisfy the needs of our modern electrical dwellings where factors of adequacy are woven in the wiring design.

In addition to the safety consideration involved, it is quite evident that the sale of receptacle outlets for dwelling occupancies, when the rule is fully enforced, will increase approximately 50 per cent (*see right*).

Grounding Receptacles

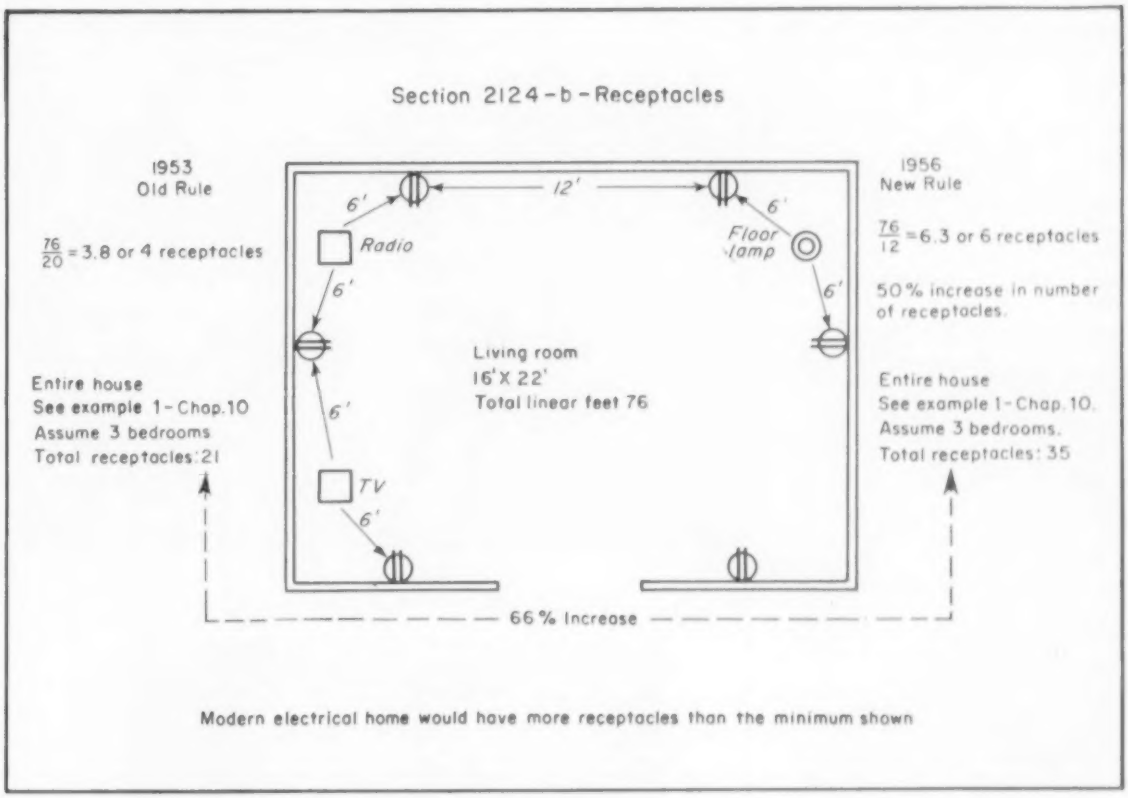
Another new important provision under Section 2124-b of the Code reads as follows:

"Receptacles installed in or on open porches, breezeways, garages, and the like which may supply equipment to be used by persons standing on the ground shall be of the grounding type."

For several years the Code—under the same section—has required a grounding type of receptacle to be installed for the connection of laundry appliances. This concept of protection by grounding has been extended to a considerable degree by the new provision.

COMING NEXT MONTH:

Article 220—Feeders—Covers the new requirements for computing size of feeder conductors for appliance loads, fluorescent lighting loads, etc.; reasons for 1956 revisions, importance to salesmen.



Reason for New Rule

Field experience during the past few years indicates that electrical shock due to the use of ungrounded portable equipment used in outside locations has become a significant factor for Code consideration. This unfavorable experience is due to the following:

1. The promotion of "do-it-yourself" has placed in the hands of our people, ungrounded electrical tools, such as drills and saws which become hazardous when used by persons standing on the ground or on conductive surfaces in contact with the earth.
2. Electrical appliances such as hedge-trimmers and lawnmowers are used by persons standing on the ground.
3. The trend towards "outdoor living" has further emphasized the need for grounding portable appliances. Patios assume the function of a living room or kitchen. The car port, breezeway and picnic table in the back yard may assume the function of a dining room. As a result, portable lamps, television and radio sets, cooking appliances, etc., are used in conductive locations and when their frames are not grounded, they become hazardous.

Field Reaction

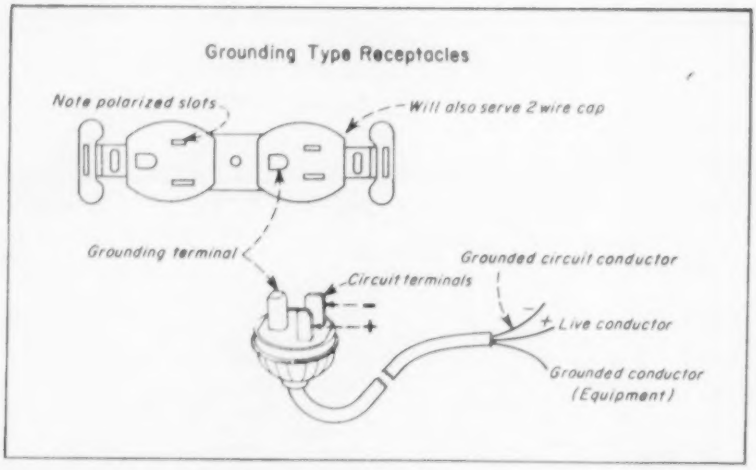
Since Section 2545 of the Code does not require the grounding of portable equipment on residential properties, this rule may be critized—as its predecessor, the laundry receptacle was—as being of little value in reducing the hazard. It is true that a grounding type of receptacle will serve either a two-wire or three-wire cord and cap. It is true that many portable tools are not provided with 3-wire cords and caps. The fact remains, however, that the Code, through this new provision, provides a reliable means of grounding, and that many of our manufacturers are supplying their tools with three-wire cords with grounding type attachment plug caps.

When grounding receptacles are available, the equipment may be reliably grounded. If not, all of us concerned may promote the conversion from a conventional receptacle to a grounding receptacle. While there may be occasion to criticize the new Code provision, the important fact remains that protection by grounding has received extended Code recognition, and in the future additional recognition may be given to the factors under criticism. Enforcement of this rule will promote a demand for more grounding type receptacles, and the wholesaler salesman should be fully informed so that the questions which trickle from the field may be readily answered.

The following page shows a grounding type of receptacle and an attachment plug cap plus the Code rule which covers design specifications that distinguish them from the conventional type of receptacle. Also shown is a diagram and the rules involved with their use plus how the principles involved are applied in the field.

The Code Section... And How It Applies in the Field

4164 Receptacles—Grounding Type. Receptacles (1) installed for the attachment of flexible cords that have a grounding conductor, (2) having maximum ratings of 15 amperes and of 150 volts, (3) having two current-carrying contacts and one fixed grounding member, and (4) having a terminal for the connection of a grounding conductor, shall have this grounding terminal of a distinctly different appearance from the other two terminals.



4165 Attachment Plug Caps. Attachment plug caps to be used with Receptacles—Grounding Type, Section 4164, and having two current-carrying contacts and one fixed grounding member shall have this grounding member so designed as to prevent it making contact with either of the current-carrying contacts of the receptacle. Any terminal for the connection of a grounding conductor shall be of distinctly different appearance from the other two terminals.

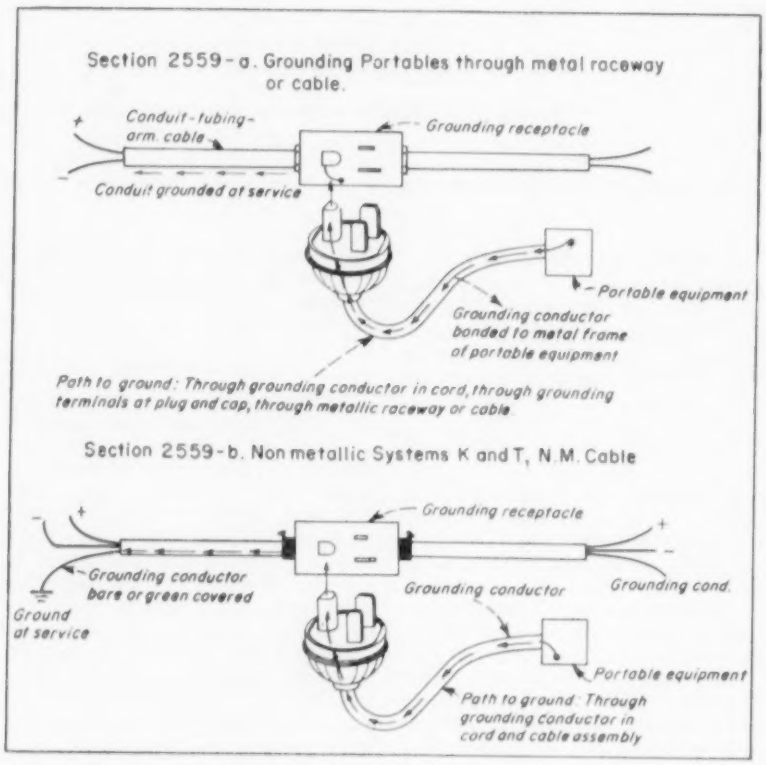
2559 Portable Equipment. Non-current-carrying metal parts of portable equipment may be grounded in any one of the following ways:

a. By means of the metal enclosure of the conductors feeding such equipment, provided an approved plug is used, one fixed contacting member for the purpose of grounding the metal enclosure, and provided, further, that the metal enclosure is attached to the plug and to the equipment by connectors approved for the purpose;

See note following section 4010.

b. By means of a grounding conductor run with the circuit conductors in cable assemblies or flexible cords, provided an approved plug is used, one fixed contacting member for the purpose of connecting such grounding conductor to the grounded metal raceway or cable armor or to a grounding conductor installed only for equipment grounding purposes; the grounding conductor in a cable assembly may be uninsulated; but if an individual covering is provided for such conductors it shall be finished to show a green color;

See note following section 4010.



4010 Attached to Receptacle Plugs. Where a flexible cord is provided with a grounding conductor and equipped with an attachment plug, the plug shall comply with section 2559-a and 2559-b unless excepted elsewhere in this Code.

PROBLEM: What Can You Do With a 90-YEAR OLD WAREHOUSE?

With Cluttered Sales Counter . . .

Archaic,
Dimly Lighted
Shelving . . .

And a Closet-Sized Fixture Showroom?

By George D. Farley

Move out? Tear it down and rebuild?

Tristate Electric Supply did neither with its ancient, four-story Hagerstown house. But what it did do means better customer relations, increased volume and more profitable business inside and outside. For the ***SOLUTION,*** turn page.

Self-Selection "Steak" for the Bread-and-Butter Trade

"I CAME HERE for an oyster roast, . . . but this looks more like steak."

That's how one contractor put it on entering Tristate Electrical Supply's 90-year old Hagerstown house—after its first floor was remodelled a la self-selection.

He was one of over 300 Tristate customers who attended the oyster-roast and unveiling in December and the first of many who were amazed by what they saw.

• **Eyesore No More**—What had once resembled a cavern, was now an open, well lighted sales floor (*see right*). Supermarket-type shelving contained a representative stock of bread-and-butter items.

Everything an electrical distributor's counter trade could want was there. But there was no counter—not in the usual sense.

There was no longer a bottleneck where 8 or 10 electricians had to jam in while countermen hustled up and down four floors assembling orders for one or two while the others did a slow, expensive (to their bosses) burn.

Instead, there's a sales-checkout counter placed to guide customer traffic in and through the open area (*see layout, right*). Two salesmen handle the floor aiding customers when needed; one never leaves it. Stock is replenished each afternoon by one of the countermen and a warehouseman.

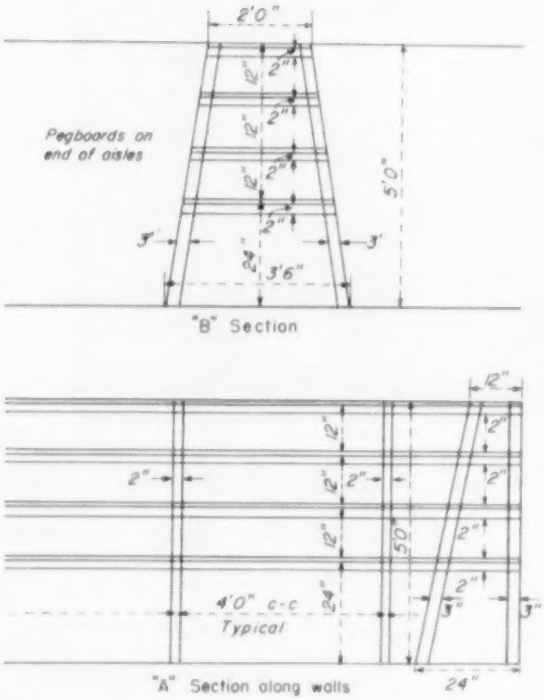
• **Uniform Idea**—Hagerstown is the last Tristate building to adopt self-selection. The firm's entire system—three branches and three service warehouses—all use it (EW—Dec. '54, p. 52).

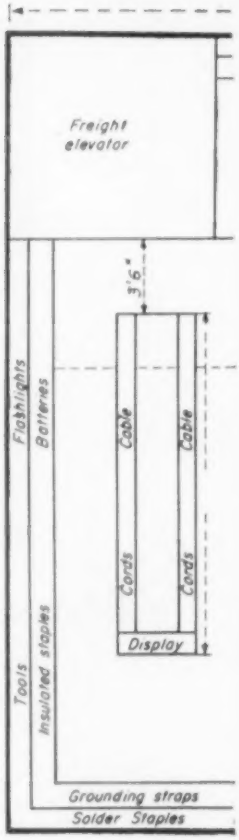
The benefits the company reaped in the other locations have already shown up at Hagerstown, says John W. Waltersdorf, executive vice president. They are:

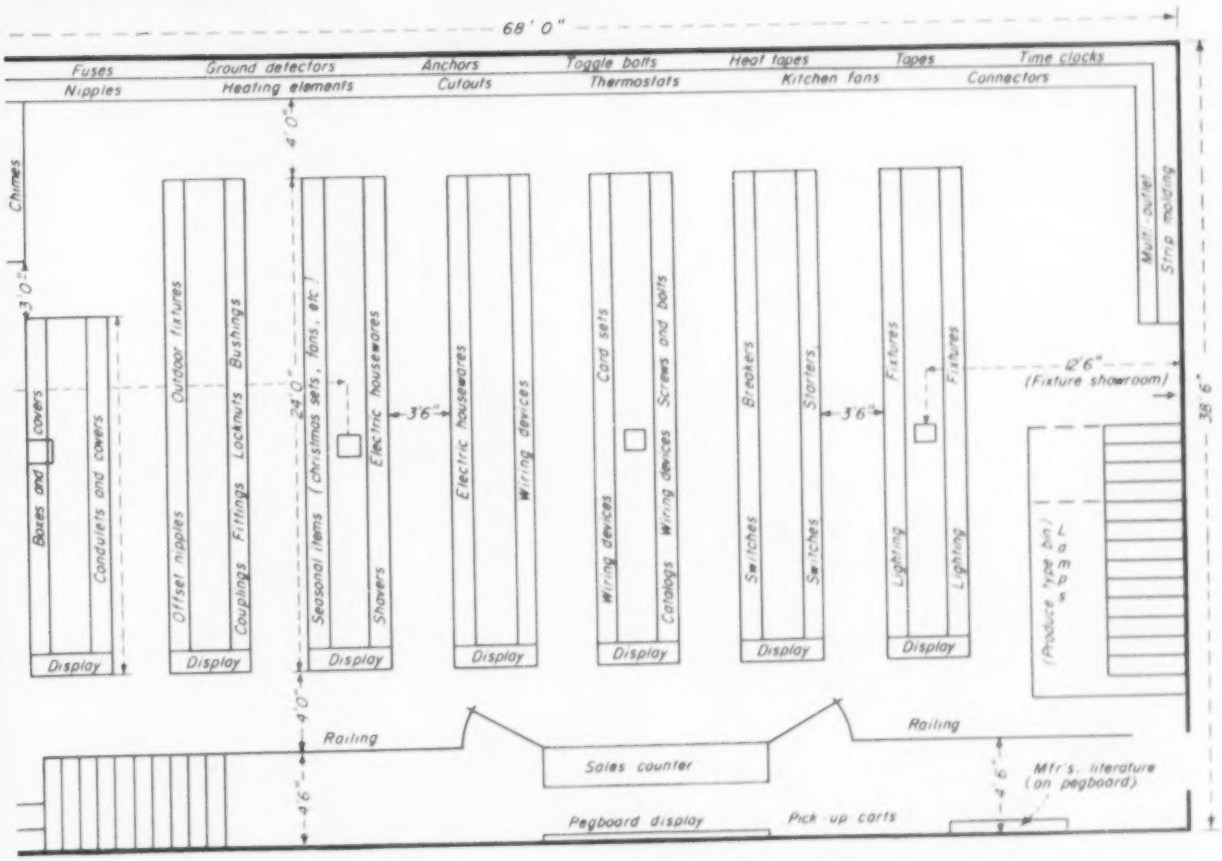
- Better use of space.
- Customers are in-and-out faster, so contractors save time, money.
- Customers make substitutions—something countermen found hard, if not impossible, to do previously.
- Minimum billings have been cut. With impulse buying, customers don't "forget" bushings, locknuts, lamps.
- Contractors are better acquainted with Tristate's big stock.

"The beauty part of it," sums up Waltersdorf, "is that price is much less a factor now. Though it's still early to say how greatly, we know our sales have increased inside and outside, since we remodelled with self-selection."

Self-Selection Shelving Plan



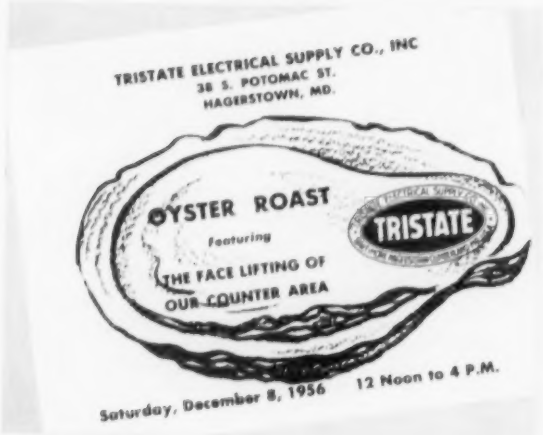




For how Tristate promoted its opening, turn page

Here's How Tristate Ran Its Re-Opening

PLANNING the self-selection remodeling and re-opening of the Hagerstown house was done by (seated, left to right) Bill Ramsey, lighting specialist; Jim Whittington, counter salesman; John W. Waltersdorf, executive v.p.; Wilburt Smith, warehouse manager; Charles Fuller, branch manager; (standing, left) Don Maisack, branch buyer and John Porter, counter salesman. All Tristate outside salesmen were on hand for the oyster roast, acted as guides for customers.



ATTRACTIVE INVITATIONS—in Tristate's traditional black and yellow—were sent out to 410 customers.

"BEFORE" pictures (see p. 81) were shown to guests at start of tour to play up dramatic contrast with new layout.

BROWSING was encouraged by guides who stressed setup's convenience, time-saving. Display (top) spells out policy.

HAPPY ENDING of tour was at oyster bar. Franks, salads, beer were served; guests relaxed, talked about new setup.

NAED Offers Full 'Programs' Package

OVER-THE-COUNTER TALK about new NAED kit finds Arthur Borger (left), electrical contactor, learning how to use Housepower rating sheets. "Instructor" is Marty Schwartz, counterman at Reliable Electrical Supply Co., Newark, N. J.

NEW YORK—A ten-part promotion package on Adequate Wiring and Housepower has been made available to members by the National Association of Electrical Distributors.

The package, which integrates a variety of material available from program groups, tells distributors how they and their customers can tie-in locally (EW—Nov. '55, p. 69).

The central element is a planning guide, an eight-page booklet which explains the programs and how to use the materials in the package.

Two elements are new, designed by NAED:

- Counter display dispenser, for use with Housepower rating sheets. This item has been made available to the industry.
- Housepower sales pitches for use by countermen, telephone and outside salesmen during the course of business.

Other elements include a contractor booklet, national advertising easel display, folder showing how to use AW ads locally, folder on Housepower training course, and booklet on Housepower plans for 1957.

NEW Activities Set By Local Groups

NEW YORK—Over 7,500 National Electrical Week planning guides have been distributed to industry groups in large and small communities across the country. In addition, nearly 4,000 pattern speeches, advertising copy suggestions and Week emblem reproductions have been distributed.

That's one measurement of the Week's local impact, according to the NEW committee, one month before the scheduled observance, Feb. 10-16 (EW—Jan. '57).

"The orders for committee material," according to M. E. Skinner, chairman, "take in all of the nation's major communities. Our analysis also shows inclusion of a range of smaller cities, including Ashville, N. Y., Wenachee, Wash., Buffalo, Minn., and Bowling Green, Ohio."

Here's a rundown of some local plans:

- Arizona — Special eight-page newspaper section on Feb. 10, sponsored by all segments of the industry, plus a dealer contest during the Week, gubernatorial and mayoral proclamations, and a dinner meeting in Phoenix to be addressed by the governor. Appliance Merchandizers Assn. is the sponsor.
- Detroit—The Electrical Association's plans include service club speeches, mayoral proclamations and a civic luncheon. Electrical inspection reports will be distributed in many schools.
- Cincinnati — The Electrical Association has set its Electrical Progress Exposition for the Week.
- St. Louis—Under the Electrical Board of Trade, the industry's plans include special newspaper section, a civic luncheon and distribution of the home inspection report.
- Toronto—A speaker of cabinet rank is slated to address an NEW luncheon meeting on Feb. 13, under the sponsorship of the Canadian Electrical Council. Nation-wide plans include magazine articles and speeches.

WASHINGTON, D. C. — NAED members in the Washington area, Maryland and Virginia will gather Tuesday morning, Feb. 12 at the Shoreham Hotel for a special area meeting tied to observance of NEW in the nation's capital. Arthur W. Hooper, executive director, will conduct the business session.

The group also will attend the NEW kick-off luncheon, the electrical trade conference and exposition, all sponsored by the Electric Institute of Washington, and timed to coincide with NEW. (See page 116 for details.)

Distributors Featured At February AW Meet

NEW YORK—Distributors Ralph J. Brown and Lester E. Barrett will have leading roles in the National Adequate Wiring conference, Feb. 21-22 at the Sherman Hotel, Chicago.

Brown, president of the National Association of Electrical Distributors, will give the distributors' view of AW in a talk before the meeting. Barrett, former NAED president, is general chairman of the 13th annual conference.

Featured speakers at the conference include Carl Bremicker, chairman of NAWB; O. F. Burnett, former head of National Electrical Contractors Association; and D. F. Kennedy, president of the Edison Electric Institute. Kennedy, who is president of Public Service Co. of Oklahoma, will deliver the keynote talk.

Other features of the two-day wiring meeting are a discussion on "Where Do We Go From Here?," panel discussion on commercial-institutional wiring, roundup of national advertising programs for 1957, a miniature Housepower wiring forum course, and "They Worked for Us" (five-minute presentations of effective wiring promotions).

Continued on page 114

FUNCTION FLOW-CHART

Main House Handles for Branch:

- Accounting
- Purchasing
- Reserve Stock
- Credit Management
- Extending
- Billing
- Collections

The Main House Sets Policy On:

- Finance
- Inventory
- Credit
- Sales Methods
- Personnel

The Branch Handles Its Own:

- Pricing
- Costing
- Direct Shipments
- Consigned Stock
- Special Purchases
- Preliminary Credit Check
- Sales Management

Techniques in Managing The Established Branch

Branch houses have been opened at a quickening pace during the last few years. All indications point to an acceleration of this trend as wholesalers attempt to capitalize on their expanding market areas. As new houses grow beyond the "minimum" size (EW—Dec. '56, p. 55), how is management affected? Here's an evaluation of one astute distributor's experience in handling main house-branch day-to-day operations

By Howard J. Emerson

Profitable management of an established branch house results from the electrical distributor-owner recognizing the need for:

1) Setting a clear-cut policy of operation

2) Determining and communicating the division of responsibility

3) Directing an economical relation of service functions between main house and branch

4) Using only thoroughly-trained, competent, adequately-compensated personnel.

In those needs is summed up an analysis of profitable branch house management as determined by a tudy of the relationship between The Electric Corporation of San Francisco and its nine-year old, 14,000-sq ft branch in Stockton, Calif.

From the experiences and judgments of Elec. Corp.'s president, W. B. "Duke" Imholt and his Stockton manager, John Zdarsky, the profitable interrelation of the main house and the branch are presented here in words and pictures by ELECTRICAL WHOLESALING.

The Main House Sets the Policy . . .

AT-A-GLANCE diagram of the Electric Corporation of San Francisco's main house-branch functions shows responsibilities designated on the basis of several years of practical operating knowledge

"THE ESTABLISHED policy of the main house must be maintained at all times by the branch operation," Imholt points out, as a fundamental of branch management.

"As a branch grows from its minimum status to an 'established' business with large volume and a bigger staff, it could be easy to keep a 'hands-off' attitude," he says ". . . letting it operate more as an affiliate than a branch. But there are many good reasons why this may not be wise.

"Frankly, one good sound reason is this—the branch is operating daily with a good chunk of the distributor's money. It is only wise management policy on his part to keep control over how this money is handled. And it

Continued on next page

Financial policies relating to branch remain under distributor-owner whether it's . . .

Month-to-month investment in operation, as Imholt (r.) is discussing over books with mgr. John Zdarsky . . .

A major investment, such as this new house the Elec. Corp. built when Stockton branch was 6 years old . . .

Or minor capital investment like different level loading dock being considered by Imholt and Zdarsky.

Continued from preceding page

wouldn't be fair to a branch manager to burden him with the responsibility of decisions that relate to the financial set up of the overall company operation."

• **Manager's Job**—The branch managership is primarily a sales position combined with management duties that relate to the functions of selling as it is done at the branch. It is the manager's job to see that the branch produces volume and that the functions of the branch are carried out smoothly. It is the owner-distributor's job to see that the volume is produced profitably through policies that conform with the financial and ethical policies of the parent company.

"At Electric Corp. of San Francisco we have clearly defined these policies," says Imholt. Here's how they are defined and carried out:

Sales Policies

The policy of the Electric Corp. of San Francisco to sell only to qualified buyers—electrical contractors, industrial firms with their own maintenance departments staffed by qualified electricians, and to accounts for resale—is a policy which the main house has passed on to the Stockton branch as a rule to be followed as strictly in Stockton as in San Francisco.

• **Policing Needed**—And, says Imholt, it is the type of policy which the distributor must police carefully at branch level because of the pressure that is put on the branch staff daily.

A branch has a dozen opportunities a day to break this rule—many more, normally, than the main house. Being in a smaller community, the branch is called on by a wide variety of prospects who feel they have the right to buy electrical supplies at wholesale—the small coffee-shop owner who wants a couple of fluorescent fixtures which he intends to hook in himself on Sunday—a farmer who wants to rewire a shed, put in a new motor control—small industrials who want a variety of small maintenance supplies.

It would be simple for the counterman to fill these small orders—most would be cash sales. For a while, at least, branch volume would increase. But, says Imholt, "it is just as important that our smaller contractor-customers in the branch area be protected as it is for us to protect qualified customers in the metropolitan area the main house serves."

• **Word of Mouth**—"If we eased up on our policies in Stockton, the word would get around. If the contractors didn't hear about it from customers, you can be sure that our competition would spread the word. We'd lose our reputation and our best customers, and

Sales policies for the branch must coincide with those established by main house:

SALES MEETINGS—held monthly—permit Imholt to set policies which apply uniformly to all of Elec. Corp.'s inside and outside selling efforts. At these meetings—which Stockton staff attends—Zdarsky (r.) brings up branch problems that differ or conflict with main house so that they can be cleared up and definite over-all company policy can be established for joint staff.

sooner or later our main house would be affected as the word spread through the industry."

"It's a steady problem," comments Stockton branch manager John Zdarsky, but not one that we haven't been able to handle in most cases. It is a matter for personal approach, tact and understanding.

"When the customer is just looking for a discount, and doesn't understand the counterman's reasons for not selling him, I try to get him into the office for a chat. If I explain frankly how our industry is set up—and try to draw a parallel in his own business—I can usually get him to understand. He won't go away happy, but chances are he won't be mad."

• **Name Misleads**—"Of course, there's another reason why we get many of these people at the counter in a smaller city like Stockton. It isn't that they are looking for a discount, it's just that "Electric Corp." seems to be the logical place to go for an electrical product. And there are ones who have no regular contact with a contractor, maybe don't even know one.

"In both these cases we help them locate or choose a contractor-dealer, and then we will help them with any electrical problem they have and quote them list price for billing through the contractor."

• **Wholesale Only**—"This happens frequently, and I can assure you that it is worth its weight in gold as a means of showing our contractors that we hold to our 'wholesale only' policy—and we don't mind pointing it out to one of them if we find them sending a big order elsewhere."

Inventory Policies

"It seems to be an inherent characteristic of a good branch manager to want too much stock," comments Duke Imholt. "That's right," says his Stockton manager Zdarsky, "If I could, I would have stock piled to the rafters here."

"And that is just why the final say on inventory for the branch lies with us here at the main house," Imholt replies. "A branch manager is wrapped up in his interest in providing the best possible service and building the largest volume possible—so it is only logical that if he were left to his own ordering he would overstock," continues Imholt.

"Even a top man like John, with all the years of experience he has, likes to feel that he is running an operation that can provide any product a customer wants, in any quantity and right away. Of course, in the long run, a too-heavy investment in stock would cut the profits of the branch and affect the manager's income.

• **Main House Responsible** — "Anyway, the burden of making the final decision on whether the quantity of stock is affecting the profit structure of the organization is something that need not be put on the branch manager. And that points to other reasons why most of us who have branches believe that purchasing inventory is a responsibility of the main house.

"For example, we know that a distributorship—as a company name and through the person of the owner or chief executive—maintains certain relationships with suppliers. The relationships, which have a lot to do with how much of any one brand is purchased and how much promotion is put behind that brand, are developed by the distributor principle in direct contact with the supplier at his factory, at conventions and other personal visits as well as regular correspondence."

• **Unified Policy**—"It is imperative that these policies be maintained, lines added or dropped, promoted or neglected, as a company. It is just not possible for a company to work as effectively with suppliers if purchases for warehouse stock are being made from two offices by two men.

"And then, there's the importance of the knowledge a good purchasing agent must have. No distributor underestimates the importance of the purchasing agent's job in relation to the profit structure of the company.

"It would be silly, I think, to expect a branch manager like Zdarsky—with a million-dollar branch to manage—to spend the time necessary to become and stay as expert on purchasing electrical supplies as our purchasing agent, Carroll Keys."

• **Frequent Changes**—"There are daily changes in the availability of goods, changes in pricing, new products, new sizes, new styles—and on and on. Keys and I keep our fingers on these changes here at the main office and guide our purchasing accordingly.

"Working closely with Zdarsky, Keys can direct purchasing from here that will be the most effective for the branch as well. It is only necessary for the branch manager to know enough

Continued on next page

How Other Main House-Branch Policies

Continued from preceding page

about the many factors that go into sound purchasing to intelligently develop the Stockton market."

One shouldn't feel that Imholt has overlooked a major consideration in having the purchasing handled through the main office—that is economy. "By pooling our orders we are able to buy in the quantities that get us the best price and free freight," he says.

"Here's how we handle that. Every day we receive here at the main house a 'short-list' which the branch has prepared and mailed the day before. This lists items on which the branch has run low, plus items for which the branch has received orders but which are not carried in stock.

"Using this list, we immediately ship enough stand-by stock to hold the branch until the next regular order. And we order—and even pick up—the special items from local manufacturer's stocks. However, we're often able to suggest substitutes for the special orders, using items which we stock here at the main house."

• **Regular Stock-check**—"Every two weeks, p.a. Keys visits the Stockton branch. There he goes over the stock item by item with Zdarsky or the warehouseman. From his records he knows what normal stock should be on any item, as well as the turnover. Of course, he considers at this point any suggestions that Zdarsky has concerning increasing or decreasing the stock of any item.

"Back at the main house, Keys coordinates these needs of the branch with the requirements we have here and places his orders. Of course, the amount ordered will not coincide exactly with the amount required because Keys adjusts it to make his order receive both the maximum discount and free freight."

All orders which are for direct shipment to the customer are handled directly out of the branch. So is the handling of consigned stock needs. Other purchases made directly by Zdarsky include special non-electrical items which the customer wants included in the order.

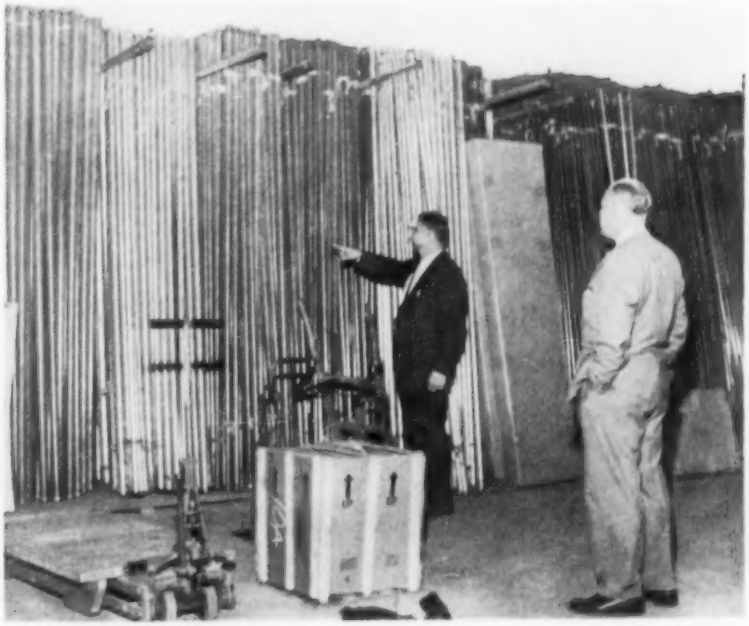
• **Odd Extras**—Because the branch covers a wide, outlying area where customers are often quite far from supply centers, Zdarsky and his salesmen must be able to get anything whether or not Electric Corporation carries it.

These may be small hardware, electronic or even plumbing items. Some

BRANCH PROCEDURE on matters which must relate to functions at the main house are set by the distributor. Imholt and Zdarsky check consigned stock inventory control which—although kept by Stockton staff—must be available for easy checking by Elec. Corp's main house management or purchasing.

INVENTORY at the branch is almost wholly under control of the main house, and must be that way, says Imholt. It's a major factor in any distributor's success, he says, and should be controlled by owner and experienced purchasing agent like Carroll Keys (r.), who inventories Stockton branch twice monthly.

Are Worked Out



MARKET PLANNING for long range development of branch is another consideration where distributor holds final decision, Imholt states, although he relies on branch manager for carrying out that plan. Included is decision on types of markets to seek, and their relation to type of inventory, as above.

PERSONNEL POLICIES are ultimately up to Imholt, who practices his customary "shake well before using" as he greets new warehouseman, Bill Cary (l.). The branch manager should make initial selection of employees, says Imholt, but distributor has final say on investment in training and long range sales potentiality.

of these extras are picked up from wholesalers in that field, some items at retail. When the customer makes the order, the branch tells him, "we don't carry that, so we don't know the price. We'll price it when we get it for you." Then the normal profit is added to the price the item costs Elec. Corp.

Personnel Policies

Here, again—in the doctrine of sound branch management, coordination by the distributor-owner and the branch manager develops a sound method of handling what could otherwise be a problem in efficiency and cost. It's a policy of coordination and cooperation between the main house and the branch—but with the distributor holding the final authority.

The procedure by which Elec. Corp. carries out its personnel policy is this:

When Zdarsky feels he needs an additional employee, he discusses it with Imholt. The need and the cost is considered, also alternates that may be possible—a shift in the staff to balance the work load if it's a warehouse problem; a shift of some work to the main house if it's an office problem.

• **Hire Locally**—If it is decided that a new employee is justified, Zdarsky makes the preliminary selection. His best sources are people recommended by employees or by customers. Preferably it will be a local man or woman.

However, there is a policy to avoid nepotism: "Having members of the same family working for the company in a branch located quite a way from the main house can be a dangerous situation," Imholt believes.

The branch manager's selection then will be interviewed by Imholt, who may bring other members of the Electric Corp. staff to the interview to get their judgment, too. "We are going to invest a lot of money in training any new member of our staff so we feel justified in being very careful in our selection," Imholt states.

"Particularly we are looking a long way in the future. We consider everyone we hire for his potential to stay on in the company and move on to positions of more responsibility. So we are looking not only for the candidate's ability to handle the immediate job."

• **Thinking Ahead**—"We might turn down a man who would be quite satisfactory for the job that needs to be filled at the moment in Stockton in favor of a less experienced man—one that will be more costly to train—because we are looking at the long range need for men that can move up from warehouse to counter and to salesman or other responsible jobs either at the branch, or by transfer to the main house."

Turn page for how wholesaling functions are shared

The Main House and the Branch

THE MAIN HOUSE SHARES

ONE OF THE MAJOR objectives of multiple unit operation is to achieve a larger volume without a proportionate increase in costs. Other factors being equal, the easiest way to hold down the costs of the branch is to have the main house handle many of the functions.

But, says Duke Imholt—with 9 years experience of branch operation to draw on—a lot of judgment has to go into both the decision on which functions should be handled by the branch and a procedure that will permit the functions to be shared economically.

• **Service Determines**—First consideration, he says, must be the effect that the location of the function will have on the customer service the branch provides. If it costs less to have a function handled at the main house, but results in putting the branch in the position of a resident salesman, then the objective and the competitive position of the branch is weakened seriously.

Job bidding is a good example seen in the relationship of the Stockton branch to the main house of The Electric Corp. of San Francisco. It was the first function to be assumed by the branch, even though the main house has a specialist on the job and to turn it over to the branch meant taking time that the branch manager might have used more advantageously in sales or management duties.

But Electric Corp.'s position in bidding many local jobs would have been jeopardized without immediate attention to the bidding.

• **Big Bidding**—Now—as a nine-year-old, million-dollar plus operation—the Stockton branch handles bidding on government jobs as well as civilian. However, when a job includes specialty items like a large quantity of lighting fixtures, panelboards, intercom equipment, etc., the branch quotes on all but the specialties and lets the main house handle this part of the bid.

This is done because a quote on such specialties will require either or both a special check with the manufacturer and using special technical knowledge which is available on the staff of the main house. However, the main house sends the quotes to the branch, where Zdarsky will include them with the rest of the job and present it as a bid from the Stockton branch.

OFFICE SERVICE that doesn't need local attention is handled for the Stockton branch at the main house of Electric Corp. of San Francisco, (above). Office manager Joe Bacigalupi (left) and his staff handle all of the accounting, including the accounts payable and receivable. They also check all the manufacturers' invoices in the section above.

Job bidding brings up a problem for the distributor who has a branch with its territory adjacent to the sales area of the main house for the same job.

• **Avoid Duplication**—This may happen when a contractor in the territory of the branch has a large job and feels he might get a better price by going to a metropolitan distributor instead of a local house. In this case, when Electric Corp.'s main house gets an order from a contractor in the territory of the Stockton branch, the order is forwarded to Stockton and the bid is made from there.

The situation may occur when a contractor sends the order to both main house and to the branch to look for the best price. It happens frequently when a San Francisco contractor may have a branch of his own in the Stockton area and bids are sought through both the head office and the regional office.

Straightening out this problem is the job of the main house, and if it isn't straightened out the company will find the main house bidding against the branch.

• **Costing, Too**—Costing invoices is another function that can go to the branch as soon as there is enough telephone work to require a 'phone girl, Imholt states. This girl should be selected with care, he points out, because she will be the nucleus of an office service staff. Electric Corp. originally hired Ruth Flores for such a job and today she is the office manager at Stockton with two assistants.

• **Shares Functions**—After nine years of operation, the Stockton branch has assumed many other functions, still shares many with the main house. What they are, and why they are assumed or shared is shown in the following picture coverage of the two houses.

Share Many Distributor Functions

THESE RESPONSIBILITIES

RESERVE STOCK FOR OVERNIGHT SHIPMENT to fill any emergency order that strains the normal branch stock can be handled out of the Elec. Corp.'s main warehouse (left). A daily "short-list" prepared by Stockton warehouse foreman Dick Clark is mailed to San Francisco, filled by Earl Douglas (right) to hold Stockton until time when firm places regular order for these items.

PURCHASING for main house and branch are coordinated by Carroll Keys (l.) so company can buy in quantity, get maximum discount and free freight, be consistent.

CREDIT approval and continuing status of branch customers is handled at main house by manager Henry H. Hanson (l.) who is being questioned by cashier Eileen Coughlan.

EXTENDING and price checking on all branch orders is done at main house by price clerk Harry Reed and Bev Gaudette. Orders are mailed from Stockton nightly, handled next day.

BILLING must stay at main house until branch volume warrants investment in billing machine, says Imholt. Machine above costs $3,500, requires experienced operator.

For branch responsibilities, turn page

THE STOCKTON BRANCH IS RESPONSIBLE FOR

PRELIMINARY CREDIT is handled by branch manager to accommodate new customers until regular credit routine is okayed by main house. Zdarsky grants limited credit.

DIRECT SHIPMENTS are ordered out of branch because they have no relation to investment in inventory. Here, salesman Joe Rihn passes one to office manager Ruth Flores for handling.

CONSIGNED STOCK—both the ordering and the inventory control of it—are handled by the branch, says Imholt, because they have no relation to over-all investment or to the amount of stock carried at the main house. But purchasing agent, Carroll Keys (center) checks records on regular visits to help maintain general similarity of policy toward consigned stock.

THESE JOBS . . .

SPECIAL STOCK—carried mostly or wholly by branch—is ordered by Zdarsky through Keys when he visits. Pole line hardware is kind of stock main house has little call for.

LOCAL OFFICE SERVICE—handled at Stockton—increases as branch grows. Helen Fowler (l.) and Ruth Flores and one more girl handle secretarial, phone orders and costing invoices.

PRODUCT KNOWLEDGE must be as keen at branch so Imholt encourages manufacturers' men like Buzz Campbell to visit with new products, though branch doesn't buy.

SPECIAL PURCHASES to meet special customer needs are handled by branch staff for goodwill. Ammeter above was purchased, will be charged at cost plus regular markup.

FIELD SALES management is branch manager's responsibility—helping salesmen like Joe Rihn (r.) plan sales efforts, traveling to tough accounts, giving his 30-year experience freely.

Financial Aid to Higher Education

A Fine Start, But...

This editorial has two purposes. The first is to salute American business for the fine start it has made in helping to relieve the financial plight of our colleges and universities. The second purpose is to stress the importance of having business provide more financial aid, and soon.

How Business Helps Higher Education

Business contributions to higher education doubled between 1950 and 1955. They jumped from $40 million to $80 million. Preliminary figures indicate they will be even higher this year.

Business firms have also shown a lot of ingenuity in devising different ways of making their contributions. The methods range from a matching of an employee's contribution to his particular alma mater to wide diffusion of the money through state and regional money-raising associations of colleges and universities. Thanks to this ingenuity, business firms now have a wide choice of ways by which to give effective aid. The way most appreciated by college administrators is the making of gifts unrestricted as to the purpose for which the money is used.

Imposing as it is, however, what business has done thus far is only a good start. Only a tiny fraction of the total number of business firms in the country are giving direct financial help to our colleges and universities; and this fraction includes fewer than half of the hundred largest corporations in the country. Also, the amount of financial help being provided by business constitutes only a very small fraction of what is needed.

Why Colleges Need More Aid

Right now our privately endowed colleges and universities need about $350 million more in operating income a year than they are receiving to enable them to pay decent faculty salaries and be in tolerably good working order otherwise. The reasons, including a severe decline in the purchasing power of their endowment income because of price inflation, have been dealt with in the previous editorials in this series.

In addition, these institutions, together with the tax-supported schools, are faced with a tremendous increase in enrollment over the years ahead. With both a rapidly increasing population of young people and an increasing propor-

tion of them going to college, this year's enrollment of 3.2 million students is expected to reach 4.0 million by 1960, and to be doubled by 1970.

For the next ten years our privately supported colleges and universities must have an average of about $400 million a year above what they can be expected to collect from tuition fees, income from endowment funds, etc.

This figure of $400 million does not include what is needed for new buildings and equipment. It also does not include help for tax-supported schools above what they get from taxes, fees, etc. Business has given and will continue to give these schools substantial aid. Indeed, almost 25% of the financial help from business for our colleges and universities went to tax-supported schools in 1955.

If aid from business met their needs for increased operating income, the privately supported colleges and universities would be given a decisive lift in performing successfully their part in our system of higher education. They would still have large needs of capital equipment — buildings, dormitories, laboratories — but help from other sources, such as that provided by devoted alumni, where they are well organized, could be expected to go far toward meeting these needs. Also some companies prefer to concentrate on meeting needs of this type.

What 1% of Profits Would Do

But do business firms have the capacity to fill the gap in adequate operating income for our privately endowed colleges and universities without putting an excessive financial burden on themselves? Those who have studied this capacity carefully say that the answer clearly is yes. If, of its profits before taxes — last year an estimated $43 billion — business were to devote 1% to helping our privately endowed colleges, it would take care of present operating needs of about $350 million a year. And the balance of $80 million would be a big step in meeting their needs for new buildings and equipment, too.

About one half of a 1% contribution of this sort would, in effect, be made by the federal government. Up to a limit of 5%, contributions of this type are exempt from the federal corporate income tax. For corporations with incomes above $25,000 per year this tax is 52%.

It is clear that not all business firms are in shape to devote 1% of their profits to aid to higher education. Even in this year of record-breaking prosperity, many of them will have no profits at all. But if business generally would take 1% of pre-tax profits as a target or benchmark for financial help to our privately endowed colleges and universities these institutions would again have sturdy financial foundations.

Relatively this is a very small price to pay (1) to insure a continuing supply of competently trained young men and women and (2) to buttress our freedom by assuring the successful survival of the privately supported sector of our system of higher education.

This is one of a series of editorials prepared by the McGraw-Hill Department of Economics to help increase public knowledge and understanding of important nationwide developments of particular concern to the business and professional community served by our industrial and technical publications.

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Donald C McGraw

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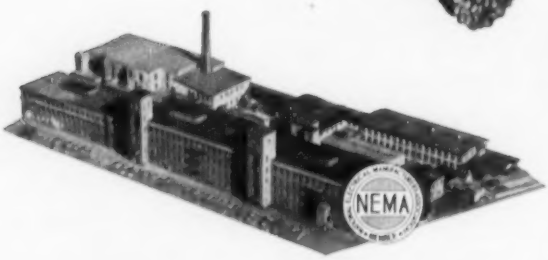

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'57 Watchword: Competition

- **Forecasts are almost all rosy—ranging from "unbounded enthusiasm" to "cautious optimism."**
- **Spokesmen see bigger spending for more goods, tighter profit-squeeze, tougher competition.**

THE WISE have now spoken. The nation's business experts have gathered for their annual confabs. Industry spokesmen have issued their year-end statements and forecasts for 1957. The perennial prophets have made their predictions, and economists have given out estimates galore.

As 1956 ended, records were set for production, employment, income and investment. But profits lagged behind the rest of the economy.

Prophet-wise, 1957 looks like the best year of them all; but profit-wise, look out.

General Economy

• **'56 Scoreboard**—Our national economy carried off the "astonishing feat" of expanding even though two crucial sectors—automobile production and residential construction—declined by 15 to 20 per cent, according to the McGraw-Hill Department of Economics.

The year's expansion in business activity reached about 20 billion dollars—more modest than 1955's 30 billion dollar growth of gross national product. About half of the 1956 increase represented higher prices rather than more goods and services. The Federal Reserve Board's index of industrial production held near 143—the level it reached during the final quarter of 1955—all during 1956, then closed the year with a spurt to 147.

Capital investment provided the biggest prop to the economy in 1956, the department indicates. Industry increased its spending on plant expansion and modernization by about 25 per cent over the 1955 total. However, corporate profits increased by less than one billion dollars in 1956. The credit shortage and tight money have acted to limit increases in inventories.

Personal income rose to $325 billion in 1956, a gain of $19 billion over 1955. Consumer expenditures made 1956 the best retail selling year on record, but consumer debt was held down below 1955. The rate of personal saving rose in 1956.

The elements of strength seen in this review of 1956: added industrial capacity (plus seven per cent) puts industry in a better position to fill increased demand; stronger financial position of consumers puts them in position to keep demand high.

• **'57 Forecasts**—Rising national output and rising prices during first-half 1957, and a tapering off in business growth in the final six months, is forseen by the Economic Forum held by the National Industrial Conference Board. For the year as a whole—a gross national product about four per cent greater than 1956—with about half of the increase due to higher prices. Thus, concludes the forum, 1957 is due to be the top business year in history.

Elements of strength seen by the Forum members: rising income and rising personal spending, as well as increased government spending at both national and local levels; residential construction expenditures remaining at current levels, and private nonresidential spending going somewhat higher.

Total outlays for capital expansion in 1957 will exceed 1956—but the trend will be toward a decline of such spending this year.

In addition, Forum members emphasized that the business environment is shifting away from the highly stimulated atmosphere of the 1945-55 decade and toward a more mature and competitive business situation.

Following are highlights of remarks by members of the Forum.

• The decline in residential construction has about reached its low point.

• Inventories are still a plus, but some time in 1957, I expect them to shift to a minus and hence have an adverse effect on GNP.

• The wholesale price index will go up somewhere in the neighborhood of two per cent in 1957.

• For nonfarm-housing . . . 1,050,000 starts or a little less, plus higher average values, plus more repair and modernization. In other private construction the emphasis may shift from office buildings and shopping centers to warehouses and distribution facilities generally.

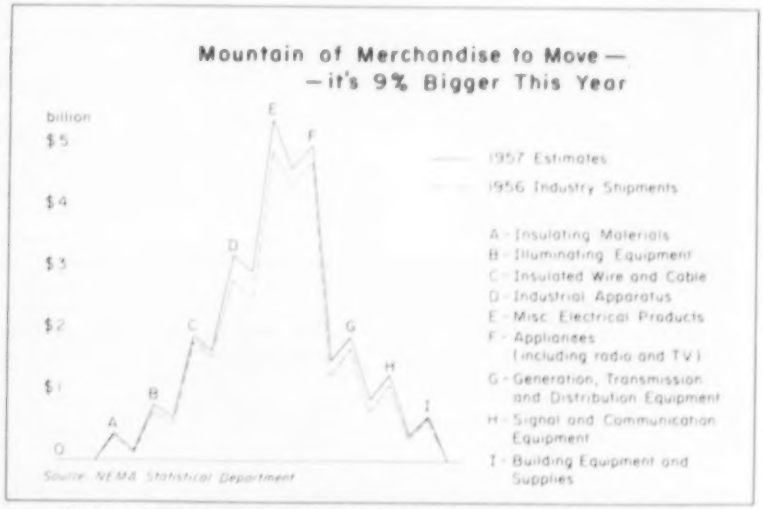
• I think we shall see a resurgence of durable goods spending in 1957. It may be up six per cent over 1956.

• We are experiencing an old-fashioned investment boom . . . Pressures on credit are likely to continue and, in fact, may become greater in the months ahead. We have probably not yet seen the cyclical highs of interest rates.

• In the year ahead, steel production is likely to be rather close to what we had in 1956, perhaps slightly less. In terms of percentage of capacity, the industry might average out somewhere between 85 and 90 per cent.

• **"Cautious Optimism"**—The business forecast symposium, sponsored by the U. S. Chamber of Commerce, took the view that 1957 will be "moderately better" than the record 1956, but that the business outlook is heavily con-

Continued on page 100



Electrical Manufacturers See Sales Gains for All Products

Watchword: Competition

Continued from page 99

ditioned by recent events in the Middle East and in Eastern Europe.

Summarizing the conference views: "the boom is getting older, but not necessarily tired." Certain stresses and strains may begin to develop. However the fundamental forces of long-run expansion . . . are strong and "our economy is fundamentally sound."

• **Final Word**—From the Department of Economics: prosperity will be maintained at a very high level, with free-spending government, more prosperous farmers, and healthy business enterprises contributing large pluses to the total statistics. There will be less talk about tight money as the year wears on—not because money will be looser, but because another word will steal the headlines: unemployment. There will be alarms about rising unemployment statistics, but they will be mainly false alarms—caused by persons such as housewives, students, etc., who don't normally hold jobs, dropping out of the labor force this year.

But, the real key word for 1957 is neither prosperity, nor tight money, nor unemployment; it's competition—tough competition. The big prizes will go only to the smart, the diligent or the extraordinarily lucky, the department forecaster concludes.

Electric Power

All industry sources agree that 1956 was a good year expansion-wise for the electric power industry.

In the power field, central stations throughout the U. S. added about 7.6 million kw of new capacity during 1956, bringing total capacity to a new high of 127.5 million kw. This report comes from Power magazine.

Slightly over eight million kw is the total scheduled for 1957 installation with more than 12 million planned for 1958.

Electric utilities will be even busier during 1957 than in 1956, says Electrical World. Construction and spending by all electric utilities is expected to rise sharply, the over-all increase probably amounting to 30 per cent over 1956.

• **Power Use**—Distribution will be expanded by the nation's utilities to serve 1.3 million new customers using an additional 42 billion kwhr.

Kwhr sales should increase about eight per cent in 1957 to 573 billion kwhr. This will come on top of a 10 per cent increase during 1956 when total sales hit 530 billion kwhr.

Residential sales will gain a larger share of the total, at the expense of industrial sales.

CHUCKLE OF THE MONTH

"$75,000 home, swimming pool, 3 Jaguars—and you say he doesn't need that much lighting!"

Construction

Even when a construction project overcomes the credit shortage, it often runs into the steel shortage, and these two barriers will keep 1957 construction from rising above the all-time high of 1956, according to the construction papers published by McGraw-Hill.

Pushing against these barriers is the biggest backlog of projects in history. New projects are pouring into architects' offices 2½ times faster than planned projects are moving toward construction.

Highways and bridges should set the fastest pace. Heavy construction and industrial expansion remain high on the list.

Construction costs continue to mount—with the increase in steel prices the chief factor during 1956. Labor costs—including wages and fringe benefits also contributed.

Contractors' prices in 1956 went up faster than their materials and labor costs. The opposite was true in 1955.

All of the construction figures presented here are measured in current dollars and do not show the 240 per cent rise in costs since the 1920's of such construction. Work-put-in-place is up 160 per cent in current dollars since the peak of the 1920's.

But if the rise in costs is discounted and the figures are adjusted for the nation's population gain, then there is a rise of only one per cent over the rate of construction in the 1920's. The nation is a-building but not fast enough.

• **Electrical Share** — Electrical construction, installation and maintenance activity in 1956 gained an estimated 10 per cent or more over the previous year in dollar volume. So states Electrical Construction & Maintenance, McGraw-Hill publication.

Some of the rise was due to price increases, but actual physical volume increased between five and seven per cent. Estimates for 1957 indicate a rise of about 7½ per cent—following the trend of recent years.

Electrical Goods

The electrical manufacturing industry promises to pass an important milestone in 1957 with output of equipment and appliances reaching $21½ billion. This estimate comes from the National Electrical Manufacturers Assn. (*See chart, page 99*).

The industry expects an overall increase of 9½ per cent in shipments during 1957, and this would pass the previous high of $19.6 billion in 1956 by a wide margin.

NEMA expects all branches of the industry to share in the record output with increases in sales ranging from five to 15 per cent. Forecasts for the various branches show: output of elec-

Continued on page 112

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WHAT'S HAPPENING IN WASHINGTON

- **Commerce Electrical Forecast**—According to a forecast in a special report issued by Secretary Weeks, the Commerce Department's Business and Defense Services Administration forecasts a 10 per cent boost in 1957 sales of new service and distribution equipment, wiring devices, lighting fixtures and appliances. The forecast—based on a January survey—states that industry programs will be greatly responsible for the boost.

  Electric motors and industrial controls will enjoy a similar sales hike, largely because of the spread of automation, BDSA says. Heavy equipment—power transmission and distribution equipment, transformers, circuit-breakers, heavy power switching and the like—will increase sales about 12.5 per cent as a result of unspent utility appropriations.

  Construction will hit $46.5 billion-worth, or 5 per cent over the 1956 record, according to the study—but private housing will dip again, to about 1 million starts. Public construction outlays may jump 12 per cent to $15 billion. Private non-residential building will also be up.

- **Slight Expansion Curb Possible**—Washington's "no"—final, firm, and flat—on any new rapid tax amortization help for industrial plant and equipment expansion may slow some companies in their expansion drives. Without certificates of necessity from the government to allow them to write big chunks of rising costs off quickly, the company planning to expand may find it harder to raise capital. Steel, already short on the construction market will be among the hardest hit. But most plant expansions will be pushed anyway.

- **Government Wins Decision**—The U. S. Supreme Court has ruled that an out-of-state contractor does not have to have a state license to do work on a federal construction project. The case involved a Texas contractor who got a $1 million contract for work at a Little Rock, Ark., air base.

  Said the Supreme Court: "Subjecting a federal contractor to the Arkansas contractor licensing requirements would give the state licensing board a virtual power of review over the federal determination of "responsibility" and would thus frustrate the expressed federal policy of selecting the lowest responsible bidder."

- **Big Atom Building Program**—Greatly accelerated building of an atom power industry is now just about a certainty. The only question undecided is: whether private industry builds the plants or the federal government does. That issue will be decided in Congress this year.

  AEC Chairman Strauss' announcement of an administration program adds ample proof that a program similar to the Federal Highway Program—but in millions, not billions—is not far off.

  Strauss wants five new reactors built by 1962. He is giving industry first crack at doing the job, but warns that unless there is a guarantee the plants could be built by the deadline, that some kind of federal participation, and even building, would be recommended.

  Democrats in Congress will push anew for a federal program along the lines of the $400 million authorization proposed by Sen. Albert Gore (D. Tenn.) last year. The issue will be drawn at the formal hearings before the Joint Committee on Atomic Energy, beginning in February.

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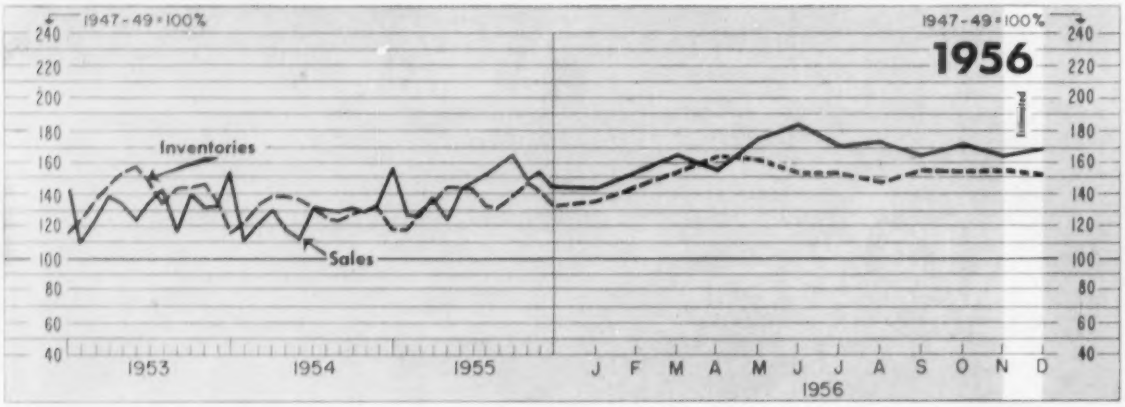
BUSINESS INDEX for November 1956*

NATIONAL PICTURE:



	INDEX					% CHANGE
	Nov. 1956	*Oct. 1956*	*Nov. 1955*	*Nov. 1954*	*Nov. 1953*	*1956 from 1955*
Sales	167	172	151	135	134	+15
Inventory ..	153	154	141	132	139	—

REGIONAL PICTURE:

	SALES (% Change)			INVENTORY (% Change)	
	From Oct. 1956	*From Nov. 1955*	*1956 from 1955***	*From Oct. 1956*	*From Nov. 1955*
NEW ENGLAND	— 8	— 9	+20	+ 6	+ 7
MIDDLE ATLANTIC	— 5	+ 4	+19	+ 1	+27
EAST NORTH CENTRAL	— 2	+ 1	+10	0	+16
WEST NORTH CENTRAL	— 1	+ 7	+11	+ 1	+17
SOUTH ATLANTIC	+ 3	+ 7	+14	0	+ 4
EAST SOUTH CENTRAL	— 6	+10	+15	+ 1	+26
WEST SOUTH CENTRAL	— 2	+11	+19	— 1	+13
MOUNTAIN	+ 7	+ 7	+ 9	— 2	+17
PACIFIC	— 1	+ 7	+15	— 4	+13

*For electrical apparatus, supplies distributors. Source: Bureau of the Census. December projection is by this publication.

**11 months 1956 from 11 months 1955

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The Ridge Tool Company, Elyria, Ohio, U.S.A.

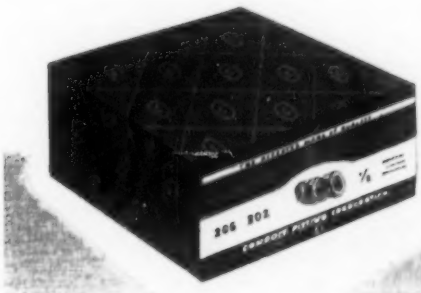
WHOLESALE PRICE INDEX

Product (1947-49=100)	Dec. 1956	Nov. 1956	% Change	Dec. 1955	% Change
1. Copper Wire, bare	159.0	159.0	0.0	181.5	−12.4
2. Building Wire, type RH-RW	148.9	148.9	0.0	147.1	1.2
3. Non-metallic Sheathed Cable	96.5	103.2	−6.5	107.1	− 9.9
4. Varnished Cambric Cable	165.5	165.5	0.0	170.4	− 2.9
5. Flexible Cord type SJ	148.8	148.8	0.0	138.6	7.4
6. Lighting Panelboard, fuse type	129.9	129.9	0.0	118.6	9.5
7. Lighting Panelboard, circuit breaker type	136.3	136.3	0.0	125.7	8.4
8. Safety Switch, 2 pole, type A, 250-volts	165.6	165.6	0.0	153.7	7.7
9. Safety Switch, 3 pole, type C, 575 volts	168.9	168.9	0.0	155.9	8.3
10. Air circuit breaker, 250 volts	179.7	179.7	0.0	151.2	18.8
11. Power Panel, fuse type, 250 volts	143.8	143.8	0.0	133.5	7.7
12. Power Panel, circuit breaker type	149.7	149.7	0.0	139.2	7.5
13. Motor Control, a.c., 25-30 hp., 400-440 volts, combination starting switch	177.6	177.6	0.0	154.6	14.9
14. Motor Control, a.c., 25-30 hp., 220 volts	163.5	163.5	0.0	151.8	7.7
15. Motor Control, a.c., 50 hp., 440 volts	189.6	189.6	0.0	160.8	17.9
16. Motor Control, a.c., 75 hp., 440 volts	164.4	164.4	0.0	152.6	7.7
17. Motor Control, d.c., 110 hp., 239 volts	181.8	181.8	0.0	169.4	7.3
18. Renewable Cartridge Fuse, 250 volts	126.0	126.0	0.0	122.3	3.0
19. Non-renewable Cartridge Fuse, 600 volts	127.9	127.9	0.0	125.4	2.0
20. Plug Fuse, 125 volts, non-renewable	111.4	111.4	0.0	109.5	1.7
21. Motor, d.c., 1/6 hp., 115 volts	173.3	173.3	0.0	154.5	12.2
22. Motor, a.c., 1/4 hp., 110-115 volts	110.1	110.1	0.0	105.8	4.1
23. Motor, a.c., 1/2 hp., 220-240 volts	116.9	116.9	0.0	110.8	5.5
24. Motor, a.c., polyphase, induction, 3 hp., open sleeves bearing	141.4	141.4	0.0	125.9	12.3
25. Motor, a.c., polyphase, induction, 3 hp., ball bearing	140.1	140.1	0.0	126.4	10.8
26. Motor, a.c., polyphase, induction, 10 hp., open sleeve bearing	159.6	159.6	0.0	134.8	18.4
27. Motor, a.c., polyphase, induction, 10 hp., ball bearing	157.2	157.2	0.0	133.2	18.0
28. Motor, d.c., 5 hp.	188.4	188.4	0.0	163.2	15.4
29. Fan, under 12 inches	116.8	114.8	1.7	112.4	3.9
30. Fan, propeller type, 24-30 in. wheel diameter, direct connected	167.6	167.6	0.0	155.9	7.5
31. Drill, production line, 1/4 in.	123.1	123.1	0.0	121.5	1.3
32. Drill, production line, 1/2 in.	117.5	117.5	0.0	114.3	2.8
33. Saw, production line, 6-8 in.	103.1	103.1	0.0	100.6	2.5
34. Pliers, 6-in., long nose	186.0	186.0	0.0	178.2	4.4
35. Lamp, 60-watt, 110, 115, 120 and 125 volts. Inside-frosted	145.0	145.0	0.0	147.2	− 1.5
36. Distribution Transformer, 15 kva.	143.5	143.5	0.0	130.5	10.0
37. Distribution Transformer, 45-50 kva.	134.7	134.7	0.0	122.4	10.0
38. Dry Type Transformer, 15 kva.	136.8	136.8	0.0	136.8	0.0
39. Dry Cell Battery, flashlight, type D	149.3	149.3	0.0	149.3	0.0
40. Dry Cell Battery, portable radio "B" pack 67 1/2 volts	139.7	136.4	2.4	132.1	5.8
41. Dry Cell Battery, general purpose, No. 6 type 1 1/2 volts	156.4	152.3	2.7	152.3	2.7
42. Voltmeter, portable type, 3 1/2-6 1/2 inches, 0-300 volts	185.0	185.0	0.0	178.6	3.6
43. Ammeter, portable type, 4-6 1/2 inches	179.8	179.8	0.0	169.9	5.8
44. Watt-meter, for instrument transformer, 100-150 volts	160.5	160.5	0.0	146.1	9.9
45. Toaster, automatic, "pop-up"	90.6	90.6	0.0	104.4	−13.2
46. Iron, under 4 pounds	93.8	93.8	0.0	104.6	−10.3
47. Cooking range, standard size	104.5	104.5	0.0	101.2	3.3
48. Washing Machine, non-automatic, wringer type	111.3	111.3	0.0	108.6	2.5
49. Washing Machine, automatic	106.0	106.0	0.0	99.9	6.1
50. Ironer table model	119.7	119.7	0.0	115.7	3.5
51. Ironer, portable model	113.8	113.8	0.0	111.3	2.3
52. Vacuum Cleaner, upright	108.5	108.5	0.0	107.7	0.7
53. Vacuum Cleaner, tank	95.9	95.9	0.0	104.6	— 8.3
54. Refrigerator, capacity 7.4-9.5 cubic feet and over	98.8	98.8	0.0	97.5	1.3
55. Home Freezer Chest, 8-12.4 cubic feet	101.0	101.0	0.0	97.3	3.8
56. Water Heater, 52 gallon tank, 230 volts a.c.	101.1	101.1	0.0	106.4	− 5.0
57. Radio, table model	90.3	90.3	0.0	85.9	5.1
58. Hi-Fi Phonograph, console	99.9	99.9	0.0	98.2	1.7
59. Radio, portable model	91.3	91.3	0.0	90.8	0.5
60. Television, table model	68.3	68.7	−0.6	68.6	− 0.4
61. Television, console model	69.8	69.8	0.0	69.9	− 0.1
62. Radio-television-phonograph combination	77.4	77.4	0.0	75.9	2.0

All % changes are increases. Decreases are indicated by minus sign.

Source: *Bureau of Labor Statistics*

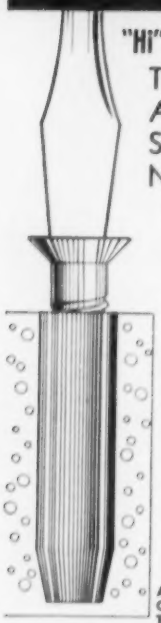
When you say, "CONDUIT FITTINGS," you are assured of a well engineered, precision-made product that speeds the job by going on easier, fitting tighter. CONDUIT malleable iron fittings get the nod from leading electrical contractors because their dependability has been time tested—job tested. Over a quarter century of service to the electrical industry. Look for the CONDUIT FITTINGS trademark on the carton.



conduit fittings
CORPORATION
6400 W. 66th STREET, CHICAGO 38, ILLINOIS • *division of U. S. INDUSTRIES, INC.*

BUILD REPEAT SALES WITH

HI TRADE MARK REG. "HOLD-TIGHT" FASTENERS



"HI" PLASTIC ANCHORS

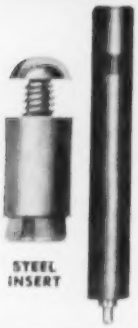
The Modern Anchor for Screws and Nails!

- Contractors and maintenance crews like 'em — easy to use . . . tremendous holding power . . . impervious to weather . . . cut anchoring costs up to 70%.
- "Use in any material you can drill" — concrete, cinder block, tile, brick, mortar, metal, etc.
- Sizes for No. 4 screw up to ½" lag screw. Put this "Hi-Profit" fastener to work for you—a sure-fire combination of quality and price.

AVAILABLE IN CARTONS OR HANDY PLASTIC KITS THAT SELL ON SIGHT!

MILLIONS IN USE!

"HI" LEAD EXPANSION ANCHORS



STEEL INSERT

for MACHINE SCREWS

Designed for use in all hard masonry materials. Insert is made of copper coated steel . . . Stronger and gives greater holding power than die-cast inserts used in ordinary lead anchors. Spring action setting tool assures perfect anchor setting . . . prevents thread damage . . . keeps lead off threads. Sizes: 6-32 to ¾-10.

SPRING ACTION SETTING TOOL FREE IN EACH CARTON!

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WHAT'S NEW WITH YOUR CUSTOMERS

"Let Customer Decide" on Electric Heat: Editor

W. T. Stuart, editor of Electrical Construction & Maintenance, reports to readers on the attitudes he has found prevalent among industry men in regard to electric space heating, and adds his beliefs concerning the future of this rapidly expanding field.

Electric space heating people are "confident, aggressive and optimistic —but occasionally frustrated," he finds. "Active objections to electric heat from utility policy-makers and discouraging electric rates are still common road-blocks in many areas to all-electric living," Mr. Stuart declares. But he sees policies and attitudes changing swiftly and more utilities swinging over to "actively promoting" electric space heating.

Since the growth of air conditioning has upset traditional load economies, and summer peaks or their immediate prospect now face utilities, winter space heating is the only balancing load in sight. Thus, he says, "attractive rates and active encouragement of electric heat are no longer unusual and appear to be inevitable over most of the United States within the next five to 10 years."

Discussing another block to electric heating progress, Mr. Stuart declares that at the present time more subtle barriers are erected by well-meaning professionals (EW Jan. '57, p. 136). "Architects, engineers, builders, even electrical contractors, are likely, on the basis of traditional industry attitudes to dismiss electric heat arbitrarily and without investigation as 'too expensive' or to damn it with faint praise and excessive caution."

He cites rapidly moving trends which are more favorable to electric and less favorable to fuel-fired systems: maintenance costs, fuel vs. energy costs; improvements in insulation; complementary air conditioning requirements. And beyond objective analysis, Mr. Stuart declares, "is always the intangible but powerful public preference for living better electrically."

On the "attitude barrier" he says: "To expect professionals generally to actively encourage electric heat at this time, is perhaps, asking too much. They have acquired, over long practical experience, their own personal preference for fuels and heating methods. They have every right to express these preferences constructively in advice, specifications or actual installations. The public, however, also has the right to be advised objectively and factually, from modern technical knowledge, and without gratuitous restraint, about electric heat. Then let the chips fall where they may!

"Is electric heat too expensive? Let's give the customer a chance to decide—with all the facts before him —in the light of his own interests and his own values," Mr. Stuart concludes.

Significance to you: More electric heating business is on the way, and it should belong to the electrical supply wholesaler if he doesn't let someone else steal a march on him. He needs to check local costs and attitudes in his own market, join utility campaigns where they exist, exert an extra push where the "attitude" barrier is already crumbling, using both promotion and personal contact to establish his own positive position.

These items were digested from a recent issue of Electrical Construction and Maintenance, a McGraw-Hill publication. Their purpose: to alert you to developments and trends reported in the operation of two of your biggest customers — electrical contractors and plant electrical men.

Phase Conversion Units Solve Motor Problems

Static conversion devices for converting single-phase power to three-phase power have found widespread application over the past few years. Designed to handle relatively small motor loads, these phase conversion units allow operation of three-phase motors on single-phase lines. Examples of applications include farms, homes, stores, bakeries, offices and many types of small industrial areas.

In addition to offering three-phase operation where only single-phase power is available, phase conversion units can be used to provide temporary or emergency three-phase power in buildings or plants which have a regular three-phase supply. In such cases, temporary three-phase power can be supplied to areas not fed by three-phase lines or to remote or out-of-the-way places simply by connecting a conversion unit to any available single-phase feeder or branch circuit.

• **Types Available**—There have been a number of these conversion devices marketed. A resume of specifications and operating data on several types is given below.

A phase converter known as "Add-A-Phase" is made by System Analyzer Corp., Nokomis, Ill. This unit produces true three-phase currents, with

Continued on page 110

Building New Products for Industry

with "SAFETY ◆ YELLOW" NEōTEX

Daniel Woodhead's own synthetic compound... Impervious to oils, greases and most chemicals

WRITE US TODAY...for free Catalog giving complete product and price information

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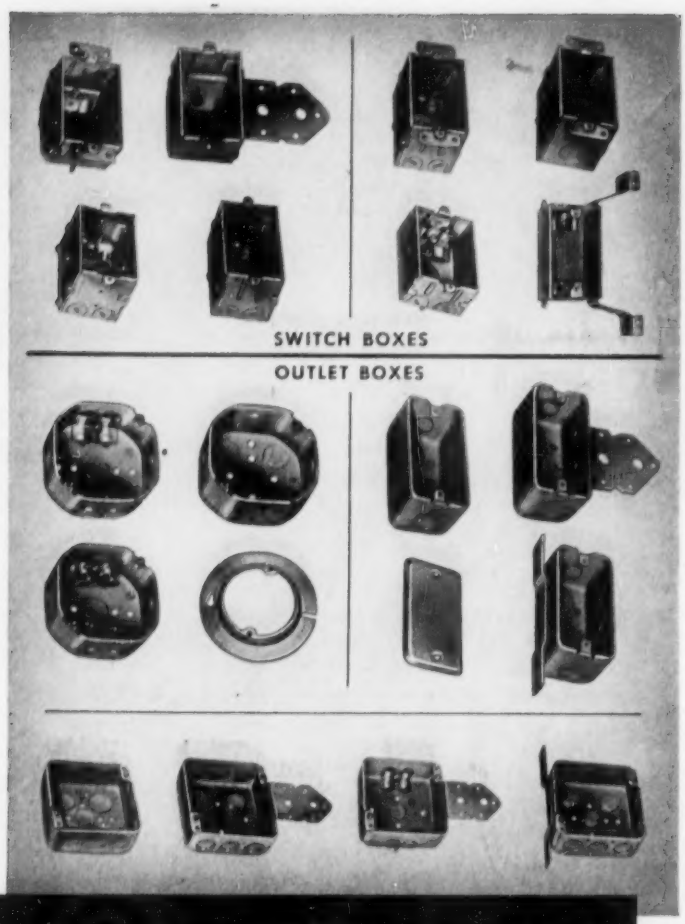


Get a bigger share of "BOX" business with the KEYSTONE QUALITY LINE

You name it and Keystone has it! Square cornered, bevel cornered, and non-gangable switch boxes. Octagon, square, and handy type outlet boxes. Plus bar hangers and bar-box combinations to meet every need. What's more, every item in the Keystone Quality Line is loaded with time-saving, cost reducing features. Knockouts and pri-outs are designed for easy, split-second removal. BX or Romex clamps are preassembled and nested in the box for easier pulling of wires. Holes for clamp screws are extruded to eliminate stripping of threads. Switch and outlet boxes are available with brackets for side or face mounting to studs. And the popular octagon outlet boxes are offered separately or in combination with deep or shallow offset bar hangers.

Yes, when it comes to wiring devices and wiring installation equipment, you can count on Keystone for the items you *need when you need them.* A complete new catalog describes the entire Keystone Quality Line. Send for your free copy today!

It pays to figure on Keystone

KEYSTONE MANUFACTURING COMPANY
23328 SHERWOOD AVENUE • CENTER LINE (Detroit) MICHIGAN

. . . the Complete Line of Wiring Installation Equipment
SOLD ONLY THROUGH RECOGNIZED ELECTRICAL DISTRIBUTORS

120-deg phase displacements, which can be balanced at any load.

Another converter is known as "Motor-X" and is available from Phillip E. Graham Co., Inc., Indianapolis, Ind. With this unit, both the starting and full-load running power factor are approximately unity. This often permits the use of a larger motor than could otherwise be used, and it minimizes the load on the system.

Another way in which three-phase motors may be used on single-phase lines involves the use of a relay. A dual-coil motor-starting relay made by Lewis Electric Co., Chicago, Ill. may be used with a capacitor to operate star-connected three-phase motors. For many temporary or permanent installations this represents the most economical way of operating three-phase motors on single-phase lines.

Significance to you: Sales of conversion units to rural and suburban customers can be a wedge for sales of many other electrical items.

New High School System Permits Future Growth

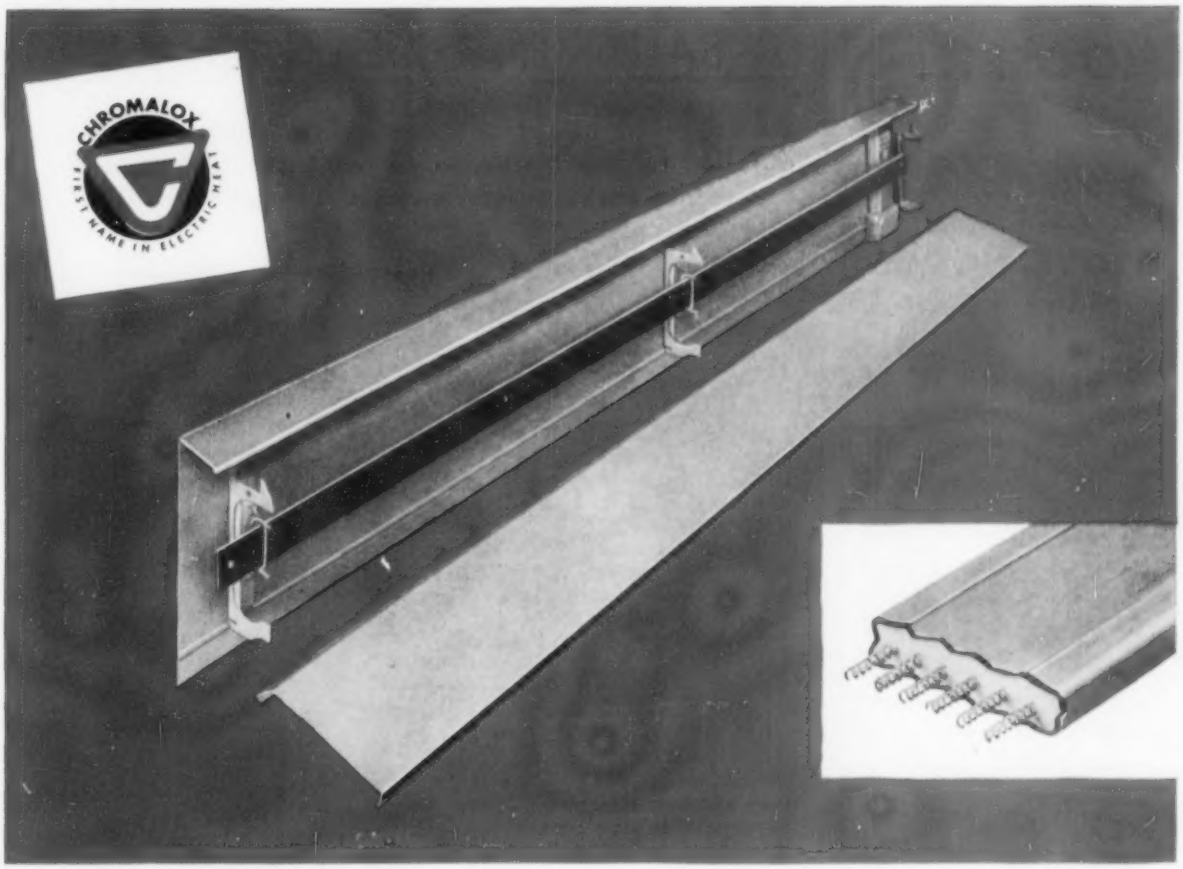
Modern electrical practice—in both engineering design and installation work—is prominent in the construction of Mount Carmel High School, Houston, Tex.

A skillfully engineered 480/277-v distribution system serves large, widespread loads of fluorescent lighting and motors for ventilating, air conditioning, heating and a host of other operations. A study of this school system indicates the advantages of 480/277-v systems where the proper ratio of power load to lighting load exists.

In addition to the modern distribution method, the school's electrical system includes a wide range of modern lighting techniques on both 277- and 120-v circuits.

• **Capacity to Spare**—Another important element of the electrical system here is the substantial amount of spare capacity engineered into feeders, panels and circuits. Such extra capacity minimizes voltage drop and copper loss, assuring efficient operation of equipment, in addition to providing flexibility for further growth load and/or expansion of the overall system.

Significance to you: Schoolbuilding, with or without federal government aid, will be a big market for the next few years. Wise communities will insist on plants—including electrical systems—capable of meeting increased future needs. Up-to-date electrical distributor salesmen can aid architects, contractors in planning bigger, better systems.



better electrical components

help make **CHROMALOX** Electric Baseboards the Quality Line

Top quality electrical components combined with smartly styled appearance are making Chromalox baseboards the standout line. The built-in quality of the electrical equipment is the result of forty years' experience in designing and building electric heating equipment—exclusively. Consider for a moment the important advantages in quality electrical components.

The heat source is a metal sheath strip heater, fully insulated for safety, and sheathed in metal for strength. It is completely shock-, break-, and moisture-proof. Its smooth finless surface cannot sag on over-voltage, and won't char dust, dirt and lint. No seasonal maintenance is required. Proved in more than 40 years of tough industrial use, it now goes to work bringing years of trouble-free performance to the American Home.

Wiring is simplicity itself. The versatile splice box can be wired from the bottom, back, or either side. Two adjacent connections are all that is necessary to connect 16 feet of baseboard heat. And Chromalox baseboards are designed to tie-in with standard surface raceway, can be connected with ordinary T wire.

Chromalox Electric Baseboard is available in four practical lengths, at 120, 208 and 240 volts. Single and two heat stages are supplied for modulated output. And there's a new "high wattage" series delivering 300 watts per lineal foot for unusual installations. It's protected with a UL listed thermal cutout.

Chromalox quality tops the field. It's backed by a no-time limit guarantee on workmanship and materials. You can get the full story simply by writing for a copy of Bulletin 800-A.

B-524

Edwin L. Wiegand Company
RESIDENTIAL HEATING DEPARTMENT
7595 Thomas Boulevard, Pittsburgh 8, Pennsylvania
Heat Better . . . Electrically

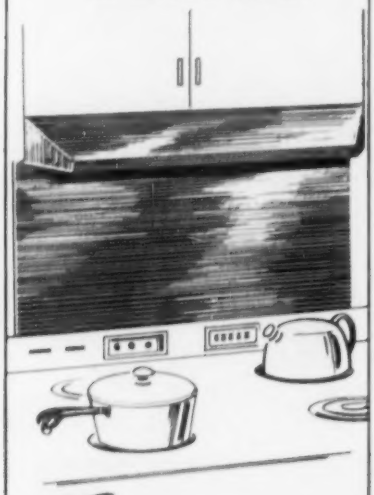
CHOOSE...

Swanson

Get better

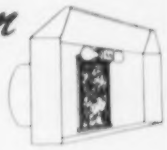
STOVE HOODS

at Lower Cost!



Swanson

"800" SERIES



"400" TWIN BLOWER SERIES

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Swanson Hoods give you service free performance, easy installation, low cost, wide choice of units, finishes and sizes.

FREE . . .

Learn why builders from coast to coast prefer Swanson Hoods. Write us today for free illustrated booklet that gives full details on our complete line of hoods, back splashes and vent fans.

Department EW-2

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SALESMEN'S IDEA EXCHANGE

As a sounding board for your ideas, EW poses a monthly question for this discussion corner. Distributor salesmen furnish the answers—controversial or agreeable.

WE ASKED . . . Who should handle complaints—you or management?

THEY ANSWERED . . .

"The salesman . . ."

The salesman should handle complaints. One of the best ways for a salesman to sell or to get really solid with a customer is to handle his complaint right.

Basic selling lessons always instruct that turning complaints and objections into sales is far easier and surer than many other methods.

I personally have found this to be very true.

White River Jct., Vt.

The salesman should handle complaints. I feel the salesman has a better chance of knowing both sides of the story whenever management just may be one-sided in some cases.

New Orleans, La.

I feel complaints should be handled by the salesman, except where company policy is involved, because nobody knows the account better than the contact man knows it.

Lancaster, Pa.

"Salesman and management . . ."

Because of the importance of complaints, I feel this is a mutual function.

Some customers are chronic complainers, and these are known by both management and salesman. However, when complaints begin to take pattern, then it is time for management and sales to get together and do something about it.

Columbus, Ind.

Whoever is familiar with the transaction leading up to such a complaint.

If management knows all the facts, then they should handle the complaint. They're better equipped to do so.

If they aren't cognizant of the circumstances—it's purely the individual salesman's responsibility.

Birmingham, Ala.

Watchword: Competition

Continued from page 100

tric appliances, including radio and television should exceed $5 billion; shipments of electrical industrial apparatus will be well over $3 billion; insulated wire and cable and generation, transmission and distribution equipment sales will each be more than $2 billion.

The year-end study further indicates that shipments of signal and communication equipment will be about $1½ billion; illuminating equipment almost $1 billion; electrical building equipment and supplies $750 million; and electrical insulating materials $440 million—all new records.

• **Air-Conditioning** — "Best year to date during 1956—new and greater records for the industry in 1957," was the year-end wrap-up by the Air-Conditioning and Refrigeration Institute.

For room air conditioners the total sales figure was more than 1.6 million units; sales in 1957 probably will reach 1¾ million units. Central air conditioning installations in homes during 1956 were about 170,000 compared with about 130,000 in 1955. In 1957, 200,000 or more homes will get central systems. The number may be even higher, ARI said, inferring that FHA and VA have begun to look with favor on liberalized financing for air conditioning.

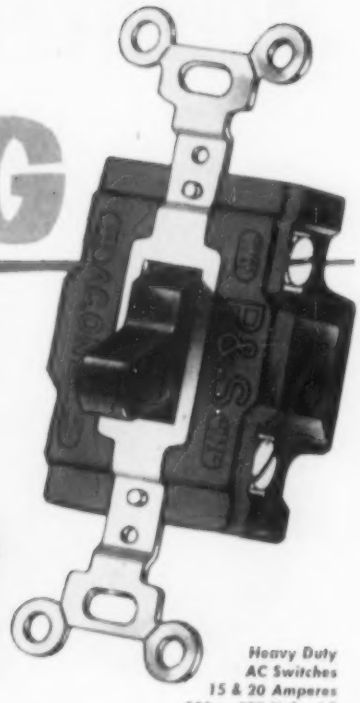
Other markets which will be hot for built-in cooling include office buildings, hospitals, factories, farm buildings and greenhouses.

• **Conclusion**—There, in a rather crowded nutshell, is the record of economic achievement set by business, industry and individuals for 1956—also the goals which they are now working to achieve during 1957.

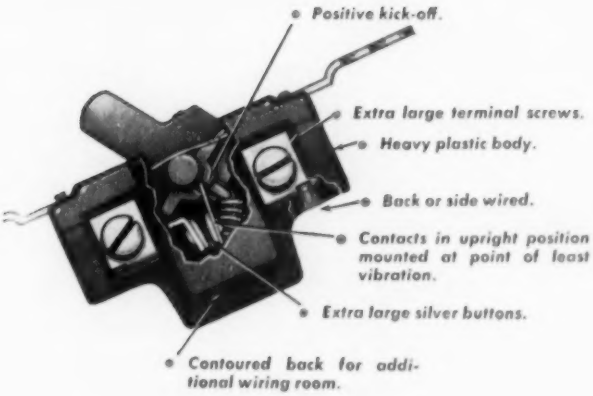
The electrical industry is gaining at an even faster pace than the rest of the economy; it has tremendous potential and perhaps more problems to face in 1957 than some other industries. And, it cannot escape anyone in the industry — wholesaler, contractor, dealer, manufacturer, editor or economist—there's a mountain of electrical goods to be moved this year.

BUILT TO TAKE A BEATING

P&S SUPER AC SWITCHES



Heavy Duty
AC Switches
15 & 20 Amperes
120 to 277 Volts AC



Made to surpass the most rigid requirements of specification wiring jobs, P&S Super AC Switches can't be matched for durability, dependability and versatility of application. Use them AT FULL RATED CAPACITY for tungsten filament lamp loads, fluorescent installations, and at 80% of the switch rating on motor loads —the highest rating the National Electrical Code permits. Heavy silver-alloy contacts keep temperature rise at a minimum . . . a P&S Super Switch will handle full amperage 24-hours-a-day, seven-days-a-week.

The *extra-heavy* plastic body is designed to take more punishment than you could possibly give it. Its unique construction makes it virtually noiseless in operation. Totally enclosed, it can be mounted in any position. Write today for full information, including the report of the Underwriters' Laboratory Tests, to Dept. EW-23.

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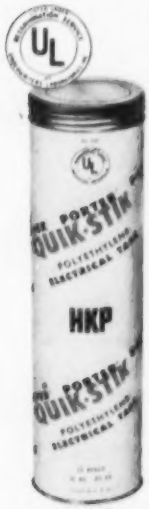
NEW! PORTER® QUIK-STIK POLYETHYLENE TAPE

PORTER SINGLE-PAK
(¾ in. x 66 ft.)

—remains flexible in cold weather



PORTER
JOB-PAK
(¾ in. x 20 ft.
—12 rolls)

Now you can offer your customers a fine plastic tape that will save money for them and make money for you . . . Porter Quik-Stik Polyethylene Tape!

- It's one of the most outstanding electrical tapes on the market today! As a one wrap primary insulation, its dielectric strength is more than 10,000 volts.
- New Porter Quik-Stik Polyethylene Tape has outstanding resistance to acids, alkalis, oils, solvents, fungus, bacteria and gases.
- It has high abrasion resistance and remains flexible from −70°F to +200°F! In addition, it has low moisture transmission and high corona resistance. It won't corrode, stain or support galvanic action!
- It can be used for all types of underground or overhead wiring. It is ideal for electronic, aircraft, automotive and factory wiring!
- Get the whole profit picture. Call your Quaker representative today about new Porter Quik-Stik Polyethylene Tape! For free brochure, write:

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Quaker Rubber Division, Philadelphia 24, Pa., or
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QUAKER RUBBER DIVISION
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H. K. PORTER COMPANY, INC.

INDUSTRY-WIDE PROGRAMS

Continued from page 49

Advance registration may be made through NAWB, 155 E. 44th St., New York, N. Y.

AW NOTES: Two new AW bureaus have been licensed, bringing the total in operation to 113. Wayne County, N. C., Electrical League was licensed on Nov. 21, and the Bartlesville, Okla., AW bureau on Dec. 11.

Chicago Promotes Apt. House Rewiring

CHICAGO—Four mailings to nearly 100,000 customers. That's the two-year scoreboard for the Apartment House Wiring Modernization committee of Chicago's Electric Association.

The committee's promotional efforts have been directly aimed at 22,000 apartment house owners, operators and management firms, Chairman T. L. Hankins told the recent Business Building Conference for contractors. The latest mailing, made in November, stressed the theme, "Do It Now," since all factors show it to be the most economical and logical time.

The first brochure, pointing up the need to stop tenant turnover, went out in April, 1955 (EW—Aug. '55, p. 46). The two earlier 1956 mailings told, respectively, a modernization case history and an air conditioning story.

Big Market in Canada

MONTREAL—Canadian wholesalers, like other segments of the industry, see wiring inadequacy as a problem—and as a challenge.

In a recent survey by Canadian General Electric Co. Ltd., distributors estimated that 73 per cent of all Canadian homes were inadequately wired. This was slightly above the 70 per cent estimate made by the overall electrical industry, taking in manufacturers, utilities, contractors and inspectors.

Distributors figured that 54 per cent of all commercial-industrial facilities were inadequate. This was slightly below the industry's average guess of 60 per cent.

Move Fixture Month

CHICAGO — The third annual Home Lighting Fixture Month will be held in September rather than October in 1957.

"The change to September was made to tie in more closely with National Home Week that same month and with other home promotions," said Ted Cox, managing director, American Home Lighting Institute. He added that the shorter title, deleting "American," would be used in the future.

bloodhounds are nice but..

Why waste their talents hunting prices?
Finding customers is more important!

Salesmen are nice too and seldom bark at customers. Why waste their talents hunting prices? They are even better at finding customers.

Moral.... If you want current suggested selling prices for electrical supplies, use ..... ***NATIONAL PRICE SERVICE Distributor's Guide.*** It is faster, more accurate, much more economical and ***never*** barks at customers.

HENDERSON-HAZEL CORP. DEPT. B-72
13601 Euclid Avenue, Cleveland 12, Ohio

Please send complete details about NATIONAL PRICE SERVICE immediately no obligation.

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Company _____
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PORCELAIN PRODUCTS' Service Mast KIT

MAKES INSTALLATION FASTER...EASIER

STANDARD FOR 2" PIPE

Also available FOR 2½" PIPE

EVERYTHING FURNISHED

but the house and conduit

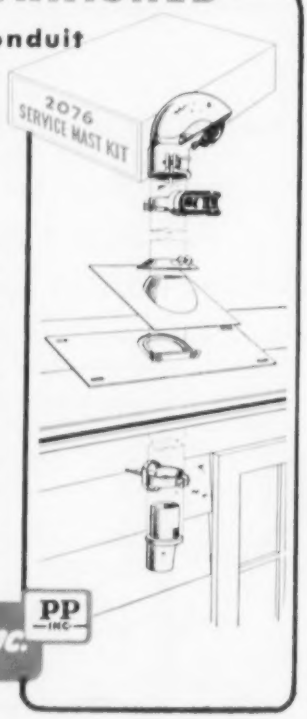
Here is the *only* Service Entrance Mast Kit complete in every detail—including roof flashing—even necessary bolts, nuts, lag screws and nails. Can be *installed* by an *electrician, with electricians tools.*

Cut down installation costs with these easier, quicker to install, service entrance mast kits.

CHECK THIS LIST OF COMPLETE PARTS

- √ 1¼" Vise-Grip Service Entrance Cap that fits a 2" pipe
- √ Galvanized Roof Flashing and Storm Collar
- √ Roof Mounting Plate of new and original design
- √ Conduit hanger with 2¼" lag screw attached
- √ Slip-fitting offset reducer with interior grounding device
- √ Non-hardening roof sealing compound
- √ All necessary bolts, nuts, lag screws and nails
- √ Plus—Porcelain Products famous 2061-C Pipe Mounting house brackets as specified

WRITE FOR DETAILS TODAY!



63 years

Porcelain Products, Inc.

FINDLAY, OHIO

PP INC

Washington, D. C. Sets Stage for Exposition

WASHINGTON, D. C.—Indications are that somewhat less time than usual will be devoted to legislating, lobbying, etc. here this month—and more will be devoted to gazing and gawking at the wonders of this electrical age.

The occasion is the Electrical Trade Conference and Exposition scheduled for Feb. 12-14 at the Shoreham Hotel. The exhibition—first of its kind in the nation's capital—is sponsored by the Electric Institute of Washington.

William G. Hills, managing director of the institute and manager of the exposition, has predicted a total of more than 7,000 visitors for the three-day display. Invitations have gone out to electrical contractors, architects, engineers, government specification writers and utility men.

An outstanding program of speakers has been arranged for the conference and luncheon sessions that will form an important part of the electrical event.

• **Speakers** — Feature of the first luncheon session will be the opening of the National Electrical Week observance in the nation's capital by a representative of the federal government.

He will be introduced by Merrill E. Skinner, chairman of NEW and vice president, Union Electric Co., St. Louis, Mo.

Speaker for the luncheon on Feb. 12 will be Oliver F. Burnett, president, National Electrical Contractors Assn., and chairman, Kelso Burnett Electric Co., Chicago, whose topic will be, "The Challenge of Electrical Expansion."

Speakers on the following days will be Harry C. MacNary, Fischbach & Moore, Inc., New York City; and Edwin Vennard, vice president and managing director of Edison Electric Institute.

Conference sessions throughout the three days will cover such topics as changes in the National Electrical Code, results and future plans of the LBE and Housepower programs, government specification procedures, electric house heating, architects views on the electrical industry and commercial lighting progress in 1957.

H. L. Robinson, Westinghouse Electric Supply Co., Washington, D.C., is general chairman of the Trade Conference and Exposition. Long-time Washington wholesaler, Paul O. West, president, Doubleday-Hill Electric Co., is chairman of the exhibitors' committee.

Your cost plus profit for any defective-in-warranty Sola Fluorescent Ballast you replace!

Offer this ballast replacement service to your customers free and receive full payment from Sola Electric Co. No Sola stock needed!

The unusually low in-warranty failure ratio of Sola fluorescent ballasts makes possible a remarkable new ballast service plan. In those rare cases where a Sola ballast may fail in-warranty, you can be authorized to replace it with *any equivalent certified CBM ballast* you stock, at a profit! You can offer this service to your customers free, and Sola will pay your *cost plus full profit* on the replacement ballast, regardless of brand. There is absolutely no obligation to purchase or stock Sola products to participate in this plan.

If you are a qualified electrical wholesaler stocking any make certified CBM ballasts for over-the-counter sale, mail the coupon below to receive recognition as a Ballast Service Center. As such, you are authorized by the Sola Electric Co. to replace any defective-in-warranty Sola ballast an electrical contractor may bring you. All you do is verify the warranty date, then issue as a replacement another Sola, or any equivalent certified CBM ballast if you don't stock Sola ballasts. Sola provides you with a chart showing these equivalents.

You make no charge whatever to your contractor customer; all he must do is sign a receipt for the replacement. Then you send this receipt and your invoice to Sola Electric Co., and you will receive a check for your cost plus usual profit on the replacement ballast, regardless of brand, just as if it were a regular sale.

Registration and free promotion materials!

Send the coupon to indicate your participation in the plan. You will receive a detailed explanation of the Sola Ballast Service Plan and a sample kit of the many free promotion materials Sola provides you as a Ballast Service Center.

SOLA Electric Co.
4633 W. 16th St., Chicago 50, Ill.
Bishop 2-1414

TO: SOLA ELECTRIC CO.
4633 West 16th St., Chicago 50, Ill.

As an electrical wholesaler who stocks certified CBM ballasts for over-the-counter sale, I want my company to be authorized as a Ballast Service Center. I realize there is absolutely no cost or obligation of any kind in accepting this free offer. Please send complete information and free sample kit of advertising and promotion materials to:

My name _____

Company _____

Address _____

City _____ Zone _____, State _____

I now stock _____ brand CBM ballasts.

IT PAYS TO HAVE GOOD CONNECTIONS
HUBBELL

and here's another
NEW
product

SOLD ONLY THROUGH AUTHORIZED ELECTRICAL WHOLESALERS

UNUSUALLY SHALLOW
GROUNDING DEVICES
Designed For Panel Mounting

The No. 5258, 125 volt, parallel slot receptacle (and its companion unit, the tandem slot 250 volt, No. 5658) is a competitive, yet very rugged, single, flush-mounted device designed for grounding exposed metal parts of portable electrical equipment. It is side wired with green grounding terminal binding post.

Each unit, when fitted with mounting flange, makes up a new female motor base, Cat. No. 5256 and No. 5656.

Male motor bases (No. 5288 and No. 5668), fitted with "U" shaped pin for grounding, are designed for use with 3-wire, grounding-type cord, connector bodies.

- Round "Shoulderless" design permits mounting in restricted spaces.
- Unusually shallow depth
- Green hexagonal grounding screw
- Rugged bakelite construction
- For use with metallic or non-metallic wiring systems

Parallel Slot 125 VOLT 15 amp.
Tandem Slot 250 VOLT 15 amp.

5258 *8-32 TAP
.812" 1.390" 1.468" 1.750" 1.093"
5658
SINGLE RECEPTACLES

5256 2.062" .203" 1.093" 1.468"
5656
FEMALE MOTOR BASES

5288 1.562" .203" .593" 2.062"
5668
MALE MOTOR BASES

HARVEY HUBBELL, INC.
HIGHEST QUALITY
WIRING DEVICES • MACHINE SCREWS
DEPT. D BRIDGEPORT 2, CONNECTICUT

WIRING DEVICE WAREHOUSE LOCATIONS ASSURE NATIONWIDE STOCK AVAILABILITY
Bridgeport 2, Connecticut
State and Bostwick Streets
Chicago 7, Illinois
37 South Sangamon Street
Los Angeles 12, California
103 North Santa Fe Avenue
San Francisco, California
1675 Hudson Avenue
Dallas 7, Texas
1111 Dragon Street

New Source of Mortgage Money: Union Funds

WASHINGTON, D. C.—The International Brotherhood of Electrical Workers has been certified by the Federal Housing Administration as eligible to buy mortgage loans insured under FHA programs.

Commissioner Norman P. Mason termed this action one of great significance in the current mortgage market. He called union pension and welfare funds "an important new source of money for those who wish to build or buy new homes."

Mr. Mason pointed out that the impact of this use of union funds will be felt in the secondary mortgage market. That is, the funds will in all probability not be used to make direct loans to builders or buyers, but to purchase mortgage portfolios on a trust arrangement through regular banking channels.

FHA recently announced the interest of other unions in investing in FHA-backed mortgages.

Gordon M. Freeman, president of IBEW stated that he hoped his union would be able to invest monthly in FHA-insured mortgages.

Four Coast Wholesalers Assume NAED Offices

NEW YORK, N. Y.—S. W. Mesick, vice president and general manager of the Los Angeles Wholesale Electric Co., Los Angeles, Calif., has been installed as vice president of the Western Region of the National Association of Electrical Distributors.

He was elected to fill the post at the annual NAED Western Region convention last fall, but his one-year term of office began this month.

Mr. Mesick is also a member of the executive committee and the board of governors of the association.

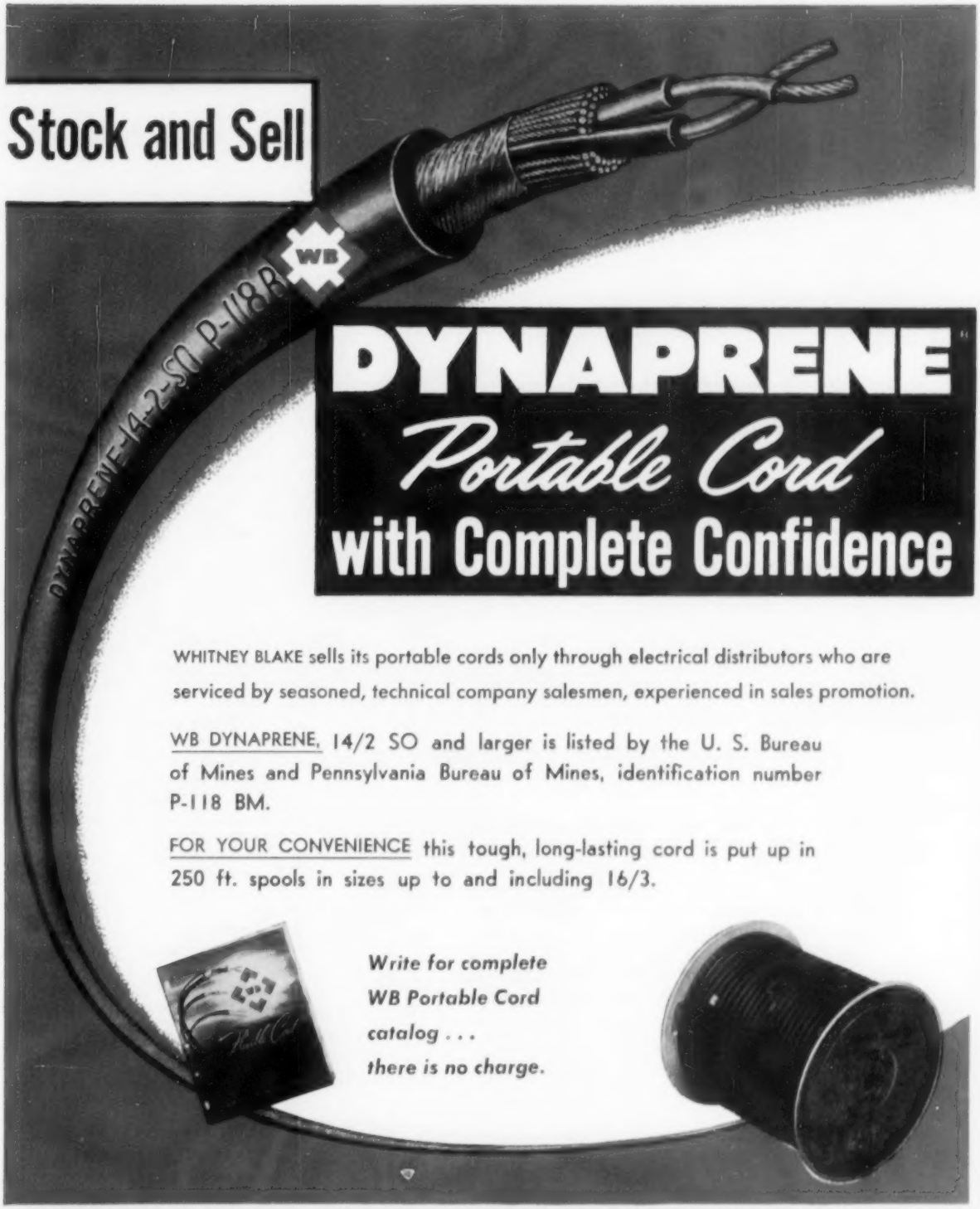
Other members of the Western Region elected to one-year terms on the board of governors are J. B. Hartwig, North Coast Electric Co., Seattle, Wash.; Don Hopkins, Electrical Suppliers, Inc., Fresno, Calif.; and R. W. Rohrbach, Pacific Wholesale Electric Co., San Diego, Calif.

Jeffries Transformer Plant in Operation

LOS ANGELES, CALIF.—Jeffries Transformer Co.'s new plant here has been completed and is now in full operation, according to Robert M. Allan, Jr., works manager.

A modern testing laboratory has been designed with facilities and equipment to simulate actual field operating conditions, the company states.

Stock and Sell



DYNAPRENE

Portable Cord

with Complete Confidence

WHITNEY BLAKE sells its portable cords only through electrical distributors who are serviced by seasoned, technical company salesmen, experienced in sales promotion.

WB DYNAPRENE, 14/2 SO and larger is listed by the U. S. Bureau of Mines and Pennsylvania Bureau of Mines, identification number P-118 BM.

FOR YOUR CONVENIENCE this tough, long-lasting cord is put up in 250 ft. spools in sizes up to and including 16/3.

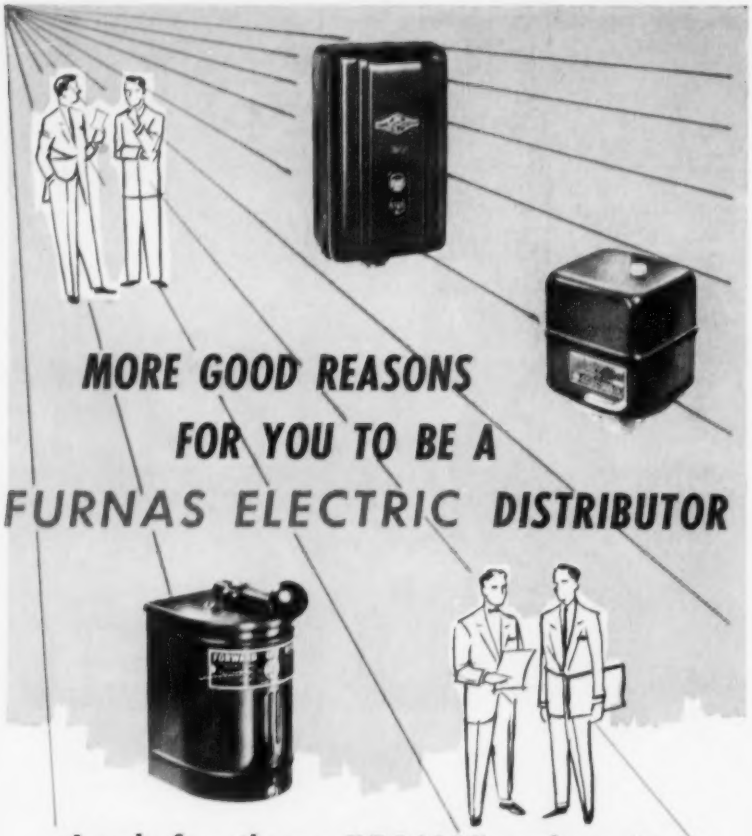
Write for complete WB Portable Cord catalog . . . there is no charge.

Well Built Wires Since 1899

©1957

WHITNEY BLAKE COMPANY

NEW HAVEN 14, CONNECTICUT



Look for these "PLUS" values in your motor control franchise

SELECTIVE DISTRIBUTION—Furnas Electric is selective in its Distributor appointments so that no two serve the same accounts.

QUALITY PRODUCT—Furnas Electric Motor Controls are designed, manufactured and tested to constantly out perform all similar devices.

WAREHOUSING—Furnas Electric looks to its Distributors to warehouse its products and do it profitably. Size of stocks are based on local requirements and area served.

PROFIT MARGIN—Distributors enjoy substantial profit margins when selling to all classes of trade.

ORDER REFERENCE—Furnas Electric refers not only inquiries, but direct orders to Distributors for handling.

These and many other advantages can be yours. For full information, write or phone today for Distributor Portfolio 5412, Furnas Electric Company, 1069 McKee Street, Batavia, Illinois.

A19

FURNAS 25th YEAR

FURNAS ELECTRIC COMPANY
BATAVIA, ILLINOIS
SALES REPRESENTATIVES IN ALL PRINCIPAL CITIES

EEWA Show Announces LBE Slogan Contest

NEW YORK, N. Y.—A new feature for promoting interest in the fourth National Electrical Industries Show, sponsored by the Eastern Electrical Wholesalers Assn., has been announced.

The show is scheduled for the 71st Regiment Armory, New York City, Apr. 8-11.

Producers of the show have inaugurated a slogan contest tieing in with the Live Better Electrically program.

They announce that a pair of tickets for a trip by air to Havana, Cuba, will be awarded to a show visitor who writes—in 12 words or less—the winning slogan to promote the Live Better Electrically theme within the electrical industry.

A list of other prizes will be awarded for slogans judged to have merit.

Contest rules state that anyone in the electrical industry may enter, except exhibitors in the show. Entries must be filed during registration at the show and cannot be accepted by mail.

Advance registration forms for the EEWA show, mailed out to prospective viewers, will carry entry blanks which can be filed during the show. In case of a tie or duplication of slogans, the slogan filed first will win the award. Judges for the contest will be announced at a later date.

• **Lighting Contest**—Also announced was the third annual National Electrical Industries Show Lighting Competition. Manufacturers of lighting equipment exhibiting in the show will be entered in the competition according to residential, commercial and industrial lighting classifications.

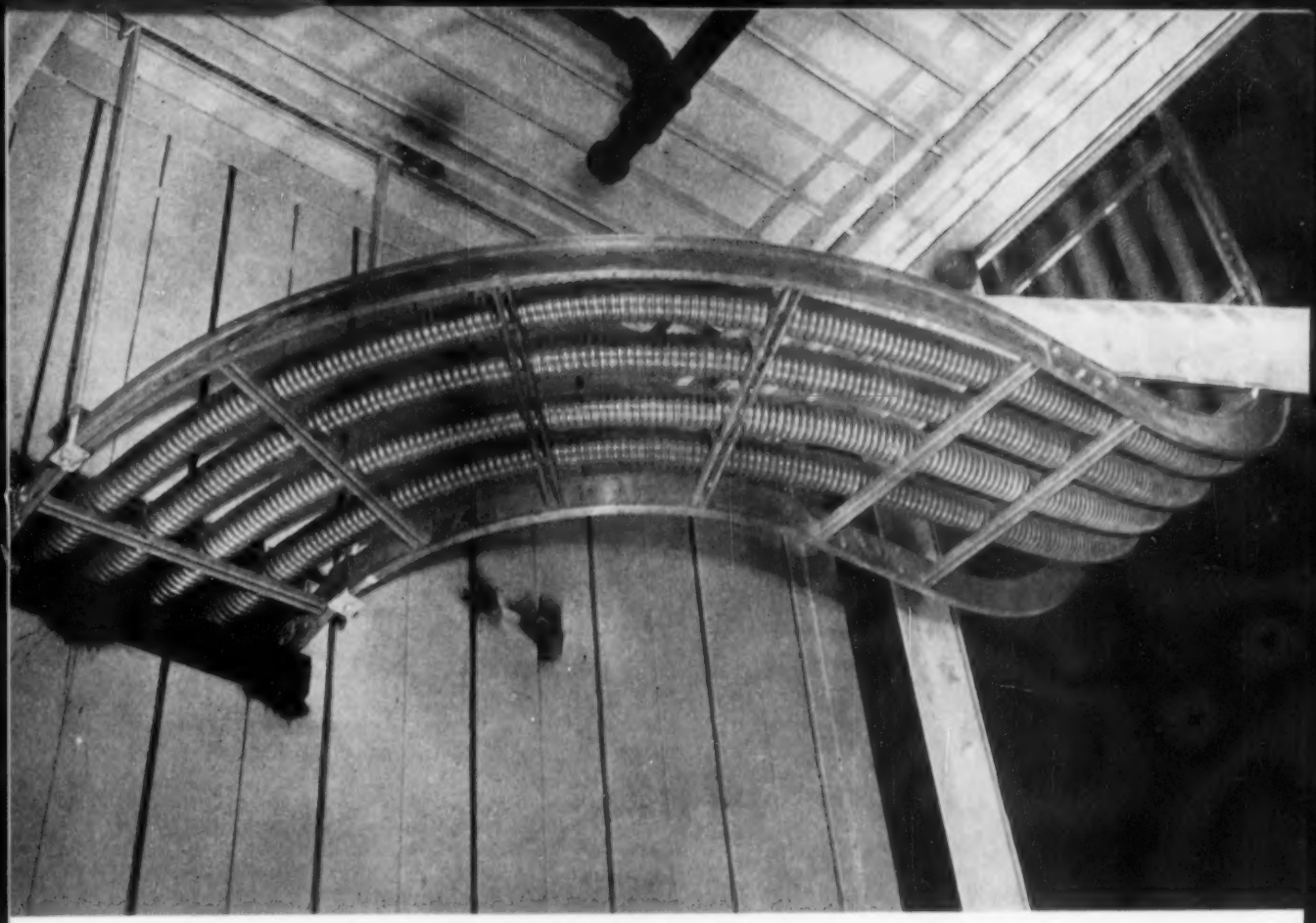
A board of judges from the architectural and decorating fields will decide the winners of trophies to be awarded in each of the above classes.

• **Beauty Queen**—"Miss Electrical Industries" will be chosen to reign over the festive part of the show from entries sponsored by firms in the industry. Electrical manufacturers, wholesalers, contractors, etc. may sponsor contestants. Details may be obtained from 19 W. 44th St., New York, N. Y.

GE Increases Lamp Prices 9 Per Cent

CLEVELAND, OHIO — Increases in list prices for lamps for general lighting and photography were made effective on Jan. 24 by the General Electric Co.

Increasing costs of labor and materials since 1953 necessitated price increases averaging slightly less than nine per cent on large lamps and about eight per cent on photo lamps, company spokesmen said.



Anaconda Interlocked-Armor Cable is installed on simple racks. Installation work is finished often in half the time required for other cables.

DURALOX:

High Profit—from low-cost installation

In every area of the country, in almost every industry, more and more plants are installing this tough, flexible cable when they add new power feeders. And for good reason.

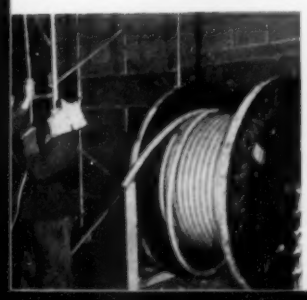
Because it is made with its own tough yet flexible metallic armor, Interlocked-Armor Cable is installed quickly—indoors or out—on light, easily installed racks. It is trained smoothly around corners, columns and other obstructions in *long uninterrupted* runs. And this cable's metallic armor affords high protection against damage.

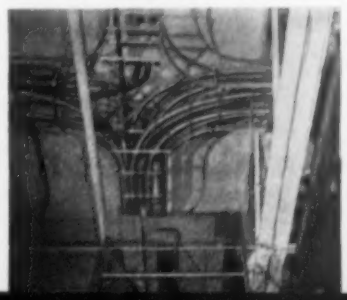
Available in multiconductor construction in sizes No. 6 Awg to 750 Mcm up to 15 kv. Also available with varnished-cambric or plastic types of insulation and Underwriters' types approved for 600 v and 5000 v.

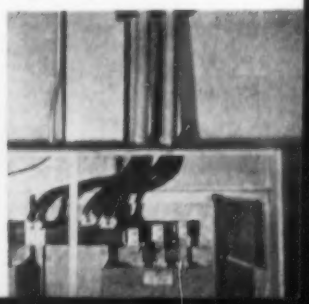
Be ready to supply Duralox Cable in *your* area! Don't miss good sales, good profits. See the Man from Anaconda, or write for new publication M-5606 "Anaconda Duralox Interlocked-Armor Cable." Anaconda Wire & Cable Company, 25 Broadway, New York 4, N. Y.

ANACONDA®

Metalworking Plant expands its power system with Anaconda Interlocked-Armor Cable. (1) Cable drops, from ceiling (2) from transformer on floor above, and spreads out (3) carrying more power to local centers (4).







CONCENTRATE

your tools *and* your SALES with . . .

William E. Simpson of Mykroy, Inc., Wheeling, Ill., shows VACO K7 Kit to Arnold Hoover at Tool Center

New VACO Tool Center Increases Profits, Too

- **Organizes your stock**
- **Steps up your sales**
- **Increases your profits**

Brings versatility, efficiency and showmanship to one concentrated selling area. Occupies only 5 square feet of floor space! Completely self-illuminated back display panel! Large storage compartments with sliding doors! Wrought iron legs! A truly modern merchandiser for modern sales. Placed in your store for practically the cost of the merchandise!

Write at once for complete details!

VACO PRODUCTS COMPANY
317 E. Ontario St., Chicago 11, Ill.
In Canada:
Atlas Radio Corp., Toronto 10

New officers for NEMA Sections

OFFICERS OF NEMA SWITCHGEAR SECTION, elected during the association's 30th annual meeting, are pictured above. Seated, left to right: T. G. A. Sillers, Allis-Chalmers Mfg. Co., chairman of section's technical advisory committee; L. W. Long, also of Allis-Chalmers, chairman of the section. Standing, left to right: Richard W. Kunkle, A. B. Chance Co., chairman, electric power connector group; F. E. Stehlik, General Electric Co., chairman, large air circuit breaker group; F. G. Schmidt, I-T-E Circuit Breaker Co., chairman, power switchgear assemblies group; and J. V. McGuire, Allis-Chalmers Mfg. Co., chairman, power circuit breaker group.

Additional Switchgear Group Chairman

Group chairmen not in the above picture are: John T. Finley, Jr., James R. Kearney Corp., chairman, high voltage fuse group; F. E. Reiber, Westinghouse Electric Corp., chairman, carrier current group and chairman, automatic circuit recloser group; T. O. Mathews, AMP, Inc., chairman, pressure connector group; and John Romano, Delta-Star Electric div., H. K. Porter Co., Inc., chairman, power switching equipment group.

Fuse Section Officers

Chairman is J. C. Ingram, Bussmann Mfg. Co. div., McGraw-Edison Co., St. Louis, Mo. Vice chairman is Kenneth W. Swain, The Chase-Shawmut Co., Newburyport, Mass. Mr. Swain also was re-elected chairman of the section's technical committee.

Low Voltage Distribution Equipment Division

Chairman is B. A. Berlin, Heinemann Electric Co., Trenton, N. J. Vice chairman is A. J. Hendry, Westinghouse Electric Corp., Beaver, Pa. John J. Doyle, Murray Mfg. Corp., Brooklyn, N. Y., was elected chairman of the division's advisory committee.

Panelboard and Distribution Board Section

In addition to the chairman, pictured below, officers include vice chairman, Daniel Staehle, Jr., Frank Adam Electric Co., St. Louis Mo.; A. A. Togesen, Bulldog Electric Products Co., div. of I-T-E Circuit Breaker Co., Detroit, Mich., chairman, advisory committee; and John L. Heins, Murray Mfg. Corp., Brooklyn, N. Y., chairman, engineering committee.

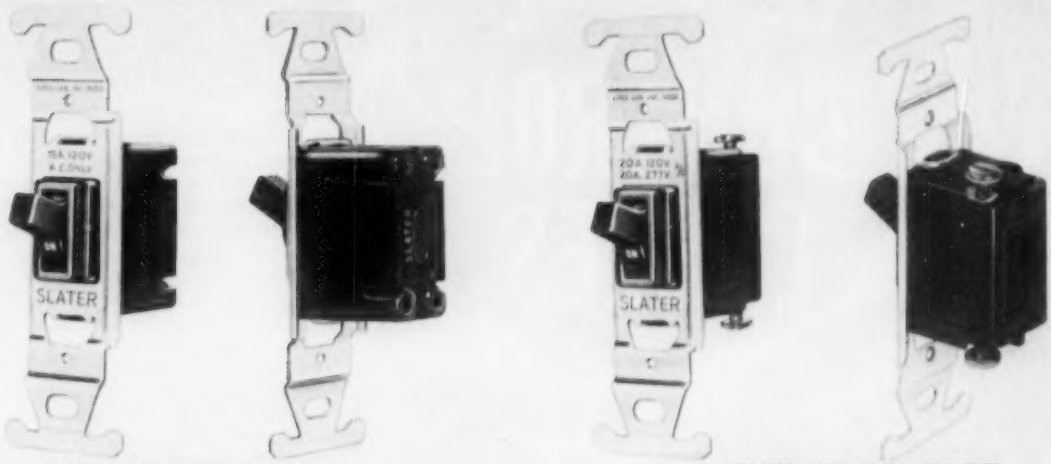
R. G. Oakley

A. W. Gilmore

A. R. Johnson

ADDITIONAL NEMA SECTION CHAIRMEN, elected last fall, include R. G. Oakley, Westinghouse Electric Corp., chairman, panelboard and distribution board section; A. W. Gilmore, General Electric Co., chairman, wiring device section; and A. R. Johnson, Cutler-Hammer, Inc., chairman, molded case breaker section.

QUIET *as a...*

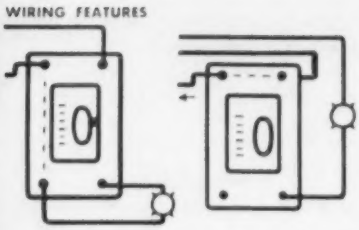


15 AMP — 120 VOLTS — 277 VOLTS
AC ONLY

20 AMP — 120 VOLTS — 277 VOLTS
AC ONLY

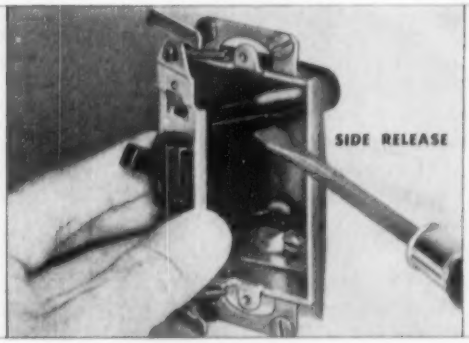
NEW! SLATER A.C. QUIET SWITCHES

WIRING FEATURES



THRU-WIRE SYSTEM
CATALOG NO. 601

LINE SHUNT
CATALOG NO. 605



LOADED WITH FEATURES

- NEW TYPE, "PLUS" SERVICE, SILVER CONTACTS
- THRU-WIRE SYSTEM OR BUILT-IN SHUNT
- "SPEEDWIRE" REAR WIRING OR SCREW TERMINALS
- EXCLUSIVE SIDE RELEASE; *(Patented)*
- OPERATES IN ANY POSITION
- EXTRA NEOPRENE BUMPERS FOR SILENCE

EASY *to install* • SIMPLE *to remove* • NO *call backs*

Available in single pole, double pole, 3-way and 4-way with ivory or brown feather-touch toggle, Slater's brand new line of ultra reliable quiet switches provide smooth, noiseless operation. Rated 15 amperes, 120 and 277 volts and 20 amperes, 120 and 277 volts. Slater quiet switches are made to serve your job requirements with perfect performance.

Slater A.C. Quiet Switches are easy to install. Next time save time, money and effort. Ask your electrical wholesaler for Slater Quiet switches with "speed wire" rear wiring and exclusive side release feature or with screw terminals.

SEND FOR CATALOG #35

SAY SLATER WITH CONFIDENCE

Slater
Lifetime Wiring Devices

SLATER ELECTRIC & MANUFACTURING CO. INC. GLEN COVE NEW YORK

NOW! BRONCO 66 CERTIFIED CONTROL CABLES

WITH UP TO 36 CONDUCTORS

BRONCO 66 CERTIFIED CONTROL CABLES are made with the tough, flexible, oil-resistant, Synchro-Cured Bronco 66 jacket that is certified to contain not less than 67.32% Neoprene. Jacket is branded every two feet.

There are three types of Bronco 66 Certified Control Cable—extra flexible portable cable, shielded portable control cable for electronic circuits, and "stationary" for important control circuits. In the stationary type there is a color-coded Neoprene jacket over each single buna-rubber-insulated conductor.

write for

NEW FREE CATALOG CONTAINING A COMPLETE LISTING OF BRONCO 66 CERTIFIED CABLES:

WESTERN INSULATED WIRE CO.
Los Angeles 58, California

Please send me your new free catalog of wires and cables.

Name _____ Title _____

Company _____

Address _____

WESTERN INSULATED WIRE CO.

Los Angeles 58, California

Kaiser Buys Wire, Cable Business of U. S. Rubber

NEW YORK, N. Y.—The wire and cable business of United States Rubber Co. has been sold to Kaiser Aluminum & Chemical Corp., effective Feb. 1.

The sale was announced last month by the U. S. Rubber Co. board of directors. It will include the plant, property and equipment at Bristol, R. I., it was stated by H. E. Humphreys, Jr., chairman, in the announcement.

The 1,400 employees of the wire and cable department will be transferred to the Kaiser Aluminum organization, maintaining the same or equivalent employee benefits, accordingly to Mr. Humphreys.

In addition, Kaiser Aluminum will take over U. S. Rubber's wire and cable inventories, sales organization and distribution network.

The purchase, for an undisclosed amount in cash, was confirmed by D. A. Rhoades, Kaiser Aluminum vice president and general manager. The corporation plans to continue service without interruption to existing customers and maintain the same channels of distribution, his announcement stated.

ARI Rating Program Termed Success

WASHINGTON, D. C.—The program of the Air-Conditioning and Refrigeration Institute to provide prospective purchasers of room air conditioners with a true comparative capacity rating guide is working out even better than anticipated, it was stated by George S. Jones, Jr., managing director of ARI.

Ten of the manufacturers who told ARI in September, 1956, that they would test and rate their room air conditioning units according to the ARI standard have published specification sheets and other consumer literature giving capacity ratings in Btu's, as prescribed by the standard.

Six other makers have provided Btu/hr ratings to ARI, for publication as the institute sees fit, Mr. Jones said, and four more companies have said they will publish such ratings in future specifications and literature.

Permacel Tape Forms Electrical Sales Div.

NEW BRUNSWICK, N. J.—A special electrical products sales division has been established by the Permacel Tape Corp., according to an announcement by George A. Fitzgerald, vice president sales.

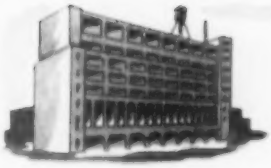
The new division, which began operating Jan. 1, is under the direction of Norman Hickok.

EVERY BUILDING

Schools

Theaters

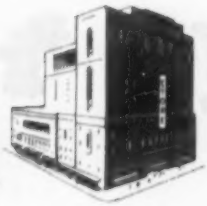
Institutions



Warehouses

EVERY BUSINESS

Restaurants



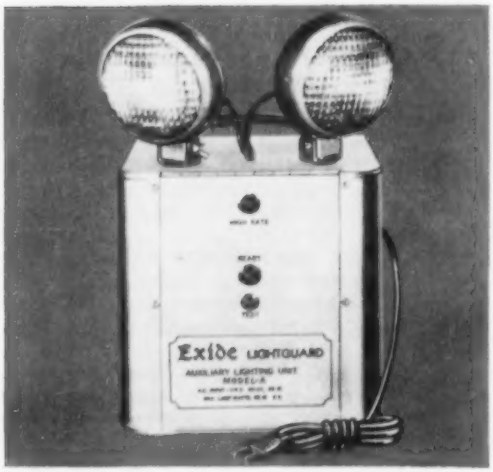
Stores

Factories

Offices

NEEDS EMERGENCY LIGHTING

Get in on the ground floor with an item that people really *need*. Become a dealer for Exide Lightguard® Emergency Lighting Units—foremost in the field. Most customers buy several. They're required by law in some communities. Send coupon today.



When power fails and lights go out, Exide Lightguard Emergency Lighting Units go on—instantly and automatically. Plug into regular outlets. Built-in charger. Batteries last for years.

Exide® **Industrial Division**
Electric Storage Battery Company, Phila. 2, Pa.
Send details on Exide Lightguards.

Name _____

Street _____

City _____ Zone _____ State _____

My business is _____

17

your customers want 'em

BOTH WAYS

by the pound

and by the piece

PAINE

ONE AND TWO HOLE PIPE AND CONDUIT STRAPS

Series No. 7000 By the Pound
Series No. 7600 By the Piece

Series No. 8000 By the Pound
Series No. 8600 By the Piece

PAINE quality pipe and conduit straps are packed by the pound and by the piece — Because your customers want to buy them — BOTH WAYS

BY THE POUND — Packed in 5 and 50 pound cartons

BY THE PIECE — Packed 10 to 1,000 in the carton

Request Additional Information

the best craftsmen always take PAINE'S

THE PAINE COMPANY, 3 Westgate Road, Addison, Illinois

Fraser, Rome Cable Corp. Honored by NEMA Group

NEW YORK, N. Y.—Top executives of the nation's wire and cable companies joined on Jan. 8 in honoring A. D. R. Fraser, president, Rome Cable Corp., Rome, N. Y., for his contributions to the industry as chairman of the Wire and Cable section of the National Electrical Manufacturers Association.

Mr. Fraser's retirement after a two-year term as section chairman was marked by a dinner in his honor. His successor, B. F. Isley, general manager, wire and cable department, General Electric Co., Bridgeport, Conn., presided at the event.

Citations indicated that under Mr. Fraser's guidance, the NEMA Wire and Cable section has grown in membership and importance throughout the electrical industry. Feature of the stepped-up program included formation of four new committees within the section and holding of semi-annual conventions for the wire and cable manufacturers. In addition, a third yearly section program is planned.

I-T-E Circuit Breaker Buys Walker Electrical

PHILADELPHIA, PA.—I-T-E Circuit Breaker Co. has acquired the Walker Electrical Co., Atlanta, Ga. through an exchange of stock.

W.M. Scott, Jr., president of I-T-E, said that the Walker Co. will operate as a wholly owned subsidiary of his firm, and will continue to sell equipment in the 10 southeastern states which have constituted its market.

The Walker firm's products include service entrance and distribution equipment and meter boxes which, Mr. Scott stated, will complement I-T-E's present line of products, including air and oil circuit breakers, disconnect switches, power transformers and switchgear.

John C. Virden Buys Holdenline Co.

CLEVELAND, OHIO — Purchase of the stock of the Holdenline Co. by the John C. Virden Co. was announced recently by John C. Virden, Jr., president. Both are Cleveland firms.

The Holdenline Co. will become a subsidiary of Virden as part of the company's expansion plan to meet increased demand for lighting fixtures, Mr. Virden said.

The move "complements our present line of residential and commercial fixtures and will add excellent sales potential for our distributors and ourselves," he stated.

Electric Housewares Outlook Clouded

CHICAGO, ILL.—Electric housewares distribution seems still at an economic crossroads. Sales volume has gone up during the past year, but it has not enabled distributors' profits to keep pace with rising costs.

Last month the electric housewares committee of the National Assn. of Electrical Distributors devoted four days to discussing the situation. At a meeting of the committee and manufacturer guests on Jan. 19, E. L. Milhender, committee chairman, indicated that although "much study has been devoted to the cost picture by individual firms in NAED . . . we are not optimistic as to how they can continue to operate as full-service wholesalers if they cannot find relief."

Among rising costs to wholesalers he listed salaries—up 33 per cent; transportation; warehouse space; and last, but by no means least, the cost of commercial money—nearly 50 per cent higher than a year ago.

These cost increases are all due to factors beyond the distributor's control, Mr. Milhender stressed. He also pointed out that sales have gone up only 28 per cent.

The obvious ways for wholesalers to reduce costs would be reduction of promotional efforts, of investment, and of their services to manufacturers and the industry, he stated. However, the committee deemed such reductions not in the best interest of anyone.

The committee did put forward what it termed "constructive suggestions" such as reducing considerably distributors' out-of-pocket contribution to cooperative advertising, and also closer liaison to develop more realistic promotional programs.

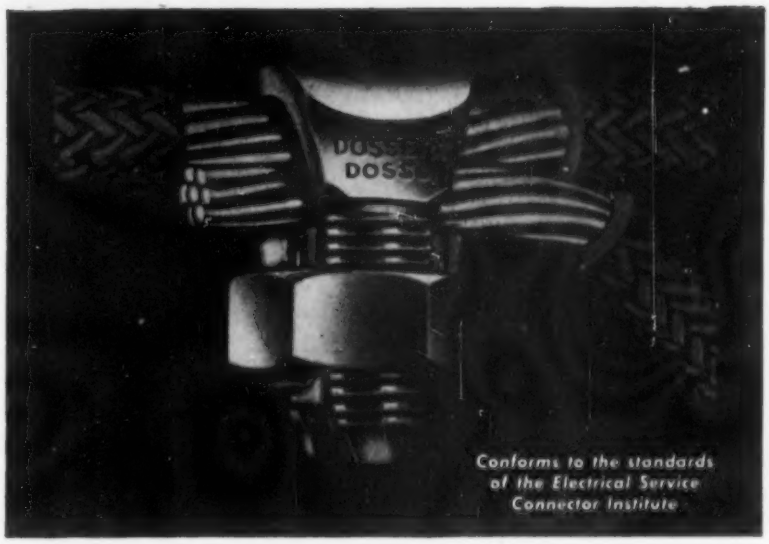
The committee advocated serious consideration by both manufacturers and distributors of housewares distribution problems — with distributors' mounting costs and declining margins forming the major crossroads.

Fire, Blast Level Davis Electrical Supply, Buffalo

BUFFALO, N.Y.—A four-alarm fire and two explosions on the night of Jan. 22 demolished the building occupied by the Davis Electrical Supply Co., Inc., located at 412 Genessee St.

Damage to the Davis building was estimated unofficially at over $500,000. In addition, six neighboring structures were damaged.

Sales manager I. J. Frank immediately asked employees of the Davis firm to be ready for emergency orders. He expressed great relief that no one was in the building at the time of the catastrophe.



DOSSON "F" SPLIT BOLT CONNECTOR

Fabricated from high strength alloys (better than average steels), the Dosson "F" is cold-formed for uniform quality. Maximum contact pressure is assured by a high translation of tightening torque. Full length pressure bars with rounded edges prevent load concentration and crushing of conductor. Built to withstand high overload, vibration. Highly corrosion resistant.

Mail coupon for FREE Dosson "F" Connector

DOSSERT MFG. CORP.
249 Huron St., Brooklyn 22, N. Y.

Gentlemen:

Please rush free sample Dosson "F" Split Bolt Connector plus catalog sheet.

Name ..... Title .....

Company .....

Address ..... Zone ..... State .....

City .....

50 YEARS OF TECHNICAL KNOW-HOW

Excl. Canadian Distributor: W. S. Gerrie & Assoc., Ltd.
4158 Dundas St. West, Toronto 18, Ontario

DOSSERT MFG. CORP.
249 Huron St., Brooklyn 22, N. Y.

ILSCO

THE BIG LUG OF INDUSTRY

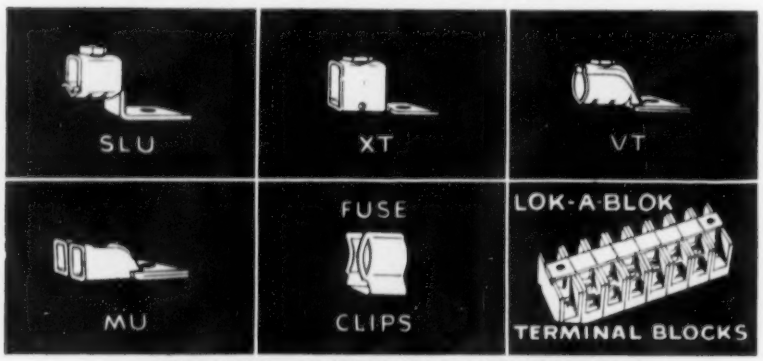
For Superior Quality
√ Check these features

MODEL LO

- ☐ Pure copper, 100% conductivity
- ☐ Wide wire range—re-usable
- ☐ U/L-CSA Approved
- ☐ Compact—rugged
- ☐ Advanced designing
- ☐ Sound engineering
- ☐ Speedy installation
- ☐ Cool operation—takes overload
- ☐ No special tools needed
- ☐ All screws wax-treated for better clamping

ALL THESE FEATURES AT LOW COST

Your √ Test Will Prove ILSCO Superiority Over Cast Or Any Other Type Lugs



WRITE FOR CATALOG #50 AND SAMPLES

ILSCO CORPORATION

5746 MARIEMONT AVE. CINCINNATI 27, OHIO

CALENDAR OF EVENTS

National Electrical Week
ARI, EEI, IAEI, IAEL, IBEW, NARDA, NAED, NECA, NEMA, NISA
February 10-16

Electrical Industry-Conference Show
Electric Institute of Washington
Shoreham Hotel
Washington, D. C.
February 12-14
Exhibits

National Adequate Wiring Bureau
13th Annual Conference
Sherman Hotel
Chicago, Ill.
February 21-22
Discussions, displays, awards

International Heating, Air-Conditioning Exposition
International Ampitheatre
Chicago, Ill.
February 25-March 1
Exhibits

Pacific Coast Electrical Association
Business Development Section
Sheraton-Palace Hotel
San Francisco, Calif.
February 28-March 1

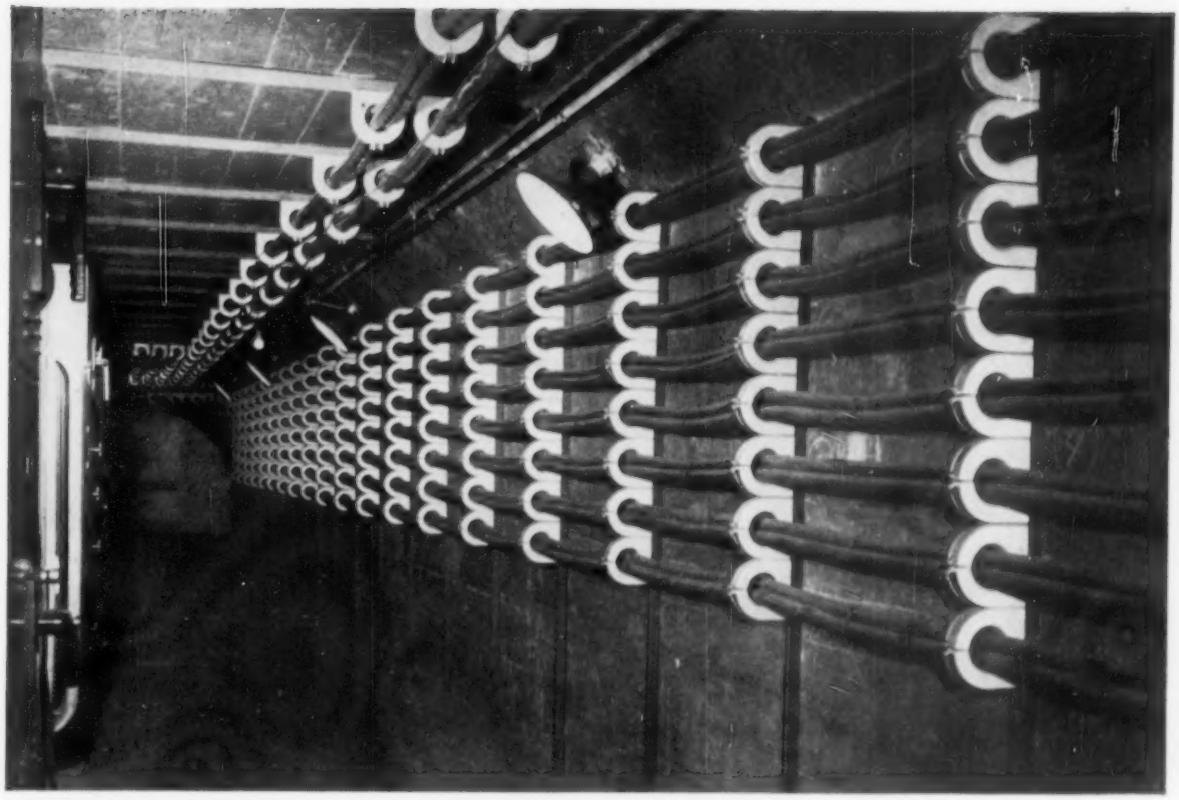
International Assn. of Electrical Inspectors
Mississippi Chapter, Southern Section
Heidelberg Hotel
Jackson, Miss.
March 3-4

10th Biennial Electrical Industry Exposition
Essex Electrical League
Olympic Park
Irvington, N. J.
March 12-14
Exhibits

Illuminating Engineering Society
Pacific Northwest Regional Conference
Empress Hotel
Victoria, B. C.
March 28-29

Illuminating Engineering Society
South Pacific Regional Conference
Hotel Statler
Los Angeles, Calif.
April 3-5

Fourth National Electrical Industries Show
Eastern Electrical Wholesalers Assn.
71st Regiment Armory
New York, N. Y.
April 8-11
Exhibits



for maximum dependability . . .
world's most modern shell plant specifies
KEYSTONE 5KV CABLES

Nothing was spared to provide the surest and most adequate supply of electrical energy for the huge motors, pumps and other equipment that make the Scranton Ordnance Plant, operated by the United States Hoffman Machinery Corporation, the largest and most modern of its type in the world.

In production less than 18 months after the project was approved, the plant makes extensive use of Keystone insulated 5kv non-shielded cable.

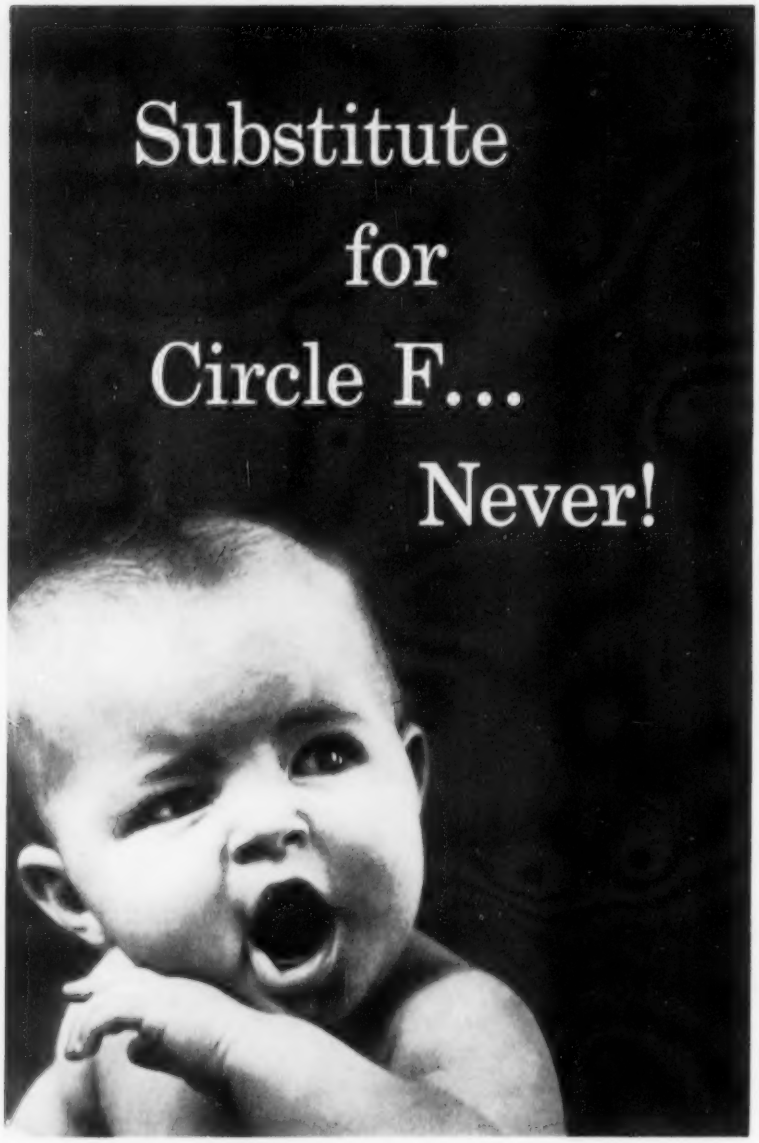
A typical application of this top-quality, yet economical cable is found in the plant's forge shop. There, 1/conductor 750,000 cm Keystone insulated 5kv non-shielded cables feed power from 3-5000 kva transformers to 12-600 hp and 12-450 hp pumps which provide hydraulic pressure for the main drawing and forging operations. These dependable power feeder cables are installed in interconnecting underfloor tunnels like the one shown above.

You, too, can use Keystone cables to advantage in your operation. Ask for Bulletin WH-463 for full details or write The Okonite Company, Passaic, N. J.

2954 A

Available with either copper or aluminum conductors

where there's electrical power . . . there's **OKONITE CABLE**



Look no further for wiring devices! Because with Circle F you've never had it so good . . . in quality and service . . . and in price, too!

No. 3401
No-KLIK
QUIET
SWITCH

No. 2524
N.E.M.A.
GROUNDING

No. 2515
N.E.M.A.
GROUNDING

GUARANTEED F WIRING DEVICES

Circle F Mfg. Co.
TRENTON 4, NEW JERSEY

UL

For your wire requirements: Eastern Insulated Wire Corp.
Box 591, Trenton, N. J.
A Subsidiary

International Assn. of Electrical Inspectors
Virginia Chapter, Southern Section
Nansemond Hotel
Norfolk, Va.
April 8-9

St. Louis Electrical Board of Trade
Progress in Electrical Equipment Exhibit
Kiel Auditorium
St. Louis, Mo.
April 9-11

Illuminating Engineering Society
Inter-Mountain Regional Conference
Hilton Hotel
Albuquerque, N. M.
April 11-12

Electrical Industry Trade Show
Electric Assn. of Kansas City
Exhibition Hall, Municipal Auditorium
Kansas City, Mo.
April 16-18
Exhibits, lectures, demonstrations

Illuminating Engineering Society
Southwestern Regional Conference
Holiday Inn
Oklahoma City, Okla.
April 28-30

International Home Building Exposition
New York Coliseum
New York, N. Y.
May 4-12, 1957
Demonstrations, exhibits, special home improvement presentations

Illuminating Engineering Society
Great Lakes Regional Technical Conference
Pantlind Hotel
Grand Rapids, Mich.
May 13-14
Speakers, papers

Pacific Coast Electrical Assn.
Annual Convention
Fairmont Hotel
San Francisco, Calif.
May 15-17
Meetings

National Association of Electrical Distributors
49th Annual Convention
Sheraton-Park and Shoreham Hotels
Washington, D. C.
May 26-29
Meetings, conference booths

Electric Association of Chicago
4th Biennial Electric Industry Show
Conrad Hilton Hotel
Chicago, Ill.
June 4-6
Exhibits

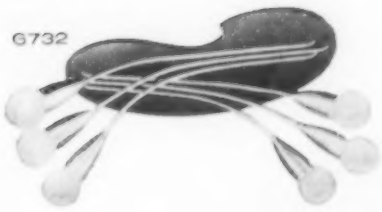
ready for immediate delivery!

new money makers

You can get excited about these new additions to the Globe lighting line. Designed for dining areas, they feature new approaches in finishes . . . construction . . . illumination.
Specified in new construction, they make homes more salable.
In remodeling, they'll clinch contracts. These outstanding lighting fixtures have "sell" and "satisfaction" built right into them.
And you can have them immediately! Call for your Globe salesman. He will show you the complete new Spring line.

IT'S EASIER TO SELL GLOBE THAN TO SELL AGAINST IT!

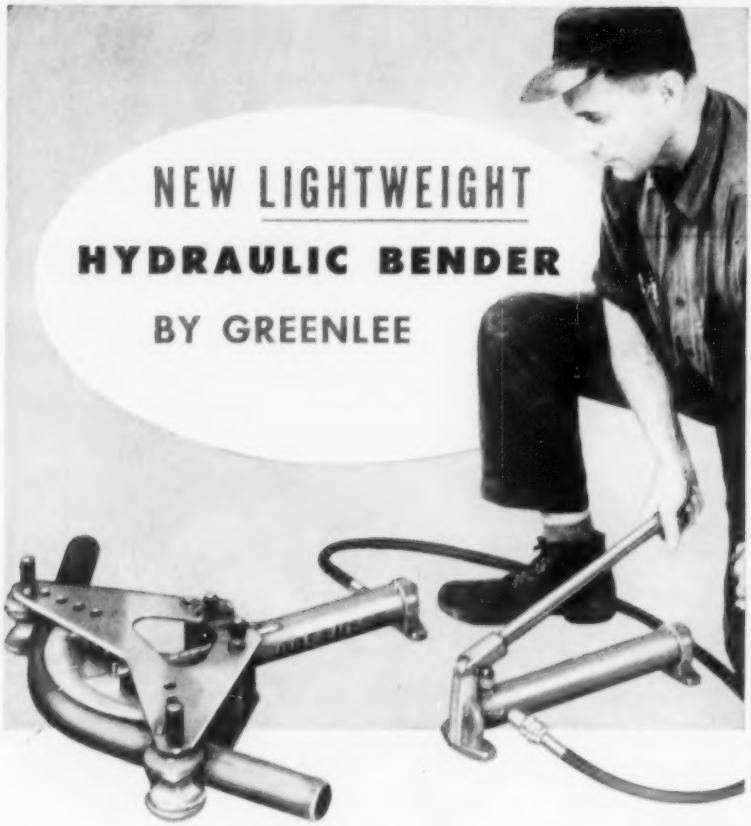
from GLOBE



Ready Now! New four-color brochure R-156 with Globe's most popular numbers from our recent catalog. *And*—the new Globe Recessed Lighting Catalog showing many patented features. *Write today!*

GLOBE LIGHTING PRODUCTS, INC., 1710 Flushing Ave., Bklyn. 37. N. Y. • Visit our showrooms: 16 E. 40 St., N. Y. 16 • Over 500 fixtures on display.

"FOR OVER A THIRD OF A CENTURY, PLANNED LIGHTING FOR BETTER LIVING"



opens up even bigger sales opportunities for you on the famous Greenlee line

Here's the kind of real portability your customers are looking for in a hydraulic bender to form 1/2" to 2" pipe and conduit. One man can easily carry and operate the new advanced-type GREENLEE No. 880—and pipe supports are designed to serve also as rollers for easy moving of the unit. Light, but strong, aluminum alloy is used in many parts for big savings in weight with no sacrifice in strength. There's power to spare here and *a complete 90° bend can be made with one ram stroke!* With attachments this versatile bender can also be used to bend thin-wall conduit, tubing, bus-bars.

This new GREENLEE No. 880 Bender *with separate hydraulic pump and ram* is easily hand-operated or can be teamed with a GREENLEE Power Pump for fast production jobs. It's a widely needed new tool that you can do big business with . . . and it's being extensively advertised by GREENLEE right now. Tie-in your sales efforts for extra profit! Write today for Bulletin E-217 and prices.

TOOLS FOR CRAFTSMEN
GREENLEE

The fast-selling GREENLEE line includes Hydraulic Pipe and Conduit Benders • Tubing Benders Knockout Punches and Cutters • Hydraulic Knockout Punch Drivers • Cable Pullers Radio Chassis Punches • Boring Tools • Chisels • Gouges • and many others.

GREENLEE TOOL CO., 1842 COLUMBIA AVE., ROCKFORD, ILL., U.S.A.

PEOPLE IN THE NEWS

Robert W. Minett, Jr. is director of advertising and merchandising for **John C. Virden Co.,** Cleveland, Ohio, lighting fixture manufacturer. He is also president of the American Home Lighting Institute and was formerly vice president of Thomas Industries, Inc., Louisville, Ky.

J. C. Madre, Jr. is manager of the new Alexandria, La. branch of **General Electric Supply Co.**

Robert L. Kempton, formerly assistant general sales manager, has been appointed general sales manager for **Edwards Co., Inc.,** Norwalk, Conn. His association with the firm dates from 1940.

Albert F. Stoll is chairman of the board of **Feedrail Corp.,** New York, N. Y. Also effective the first of the year, **Frank L. Novak** became president, **Alexander Hammond,** vice president and **J. A. Heinzelman,** secretary.

C. E. Kirkpatrick, Cleveland district manager, was elected a director of the **Graybar Electric Company** at the December meeting of the board. He has held his present position since 1950 and has been associated with Graybar since 1936.

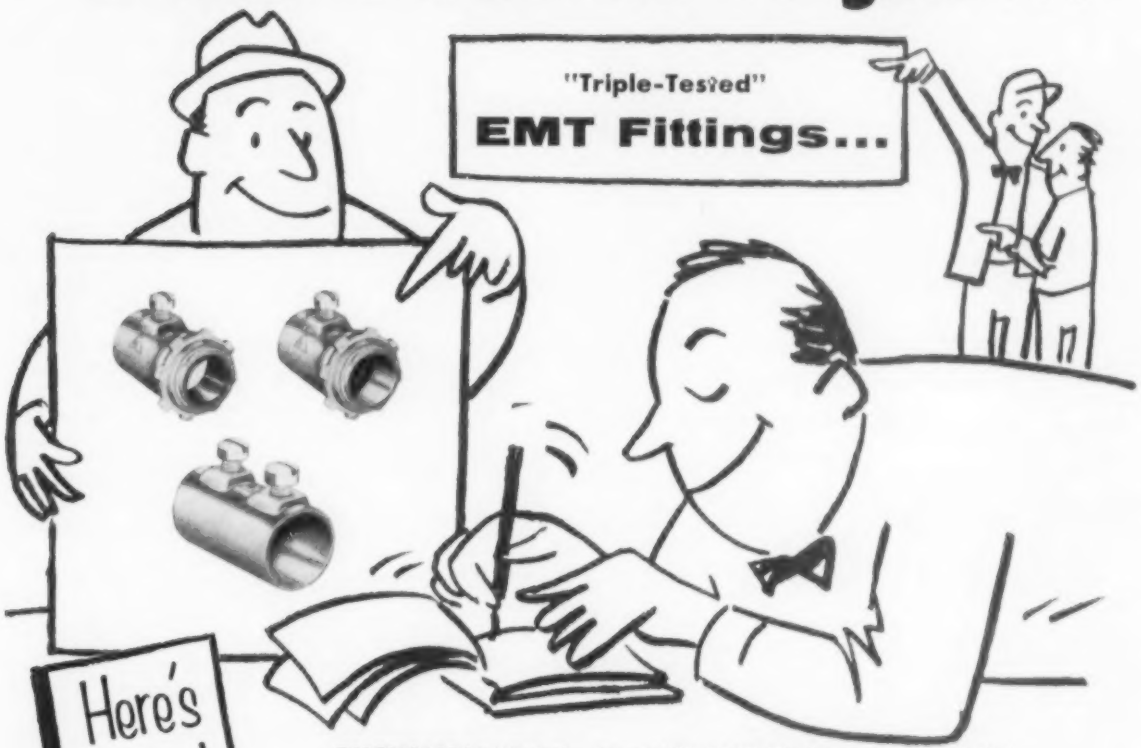
Charles L. Amick has been promoted to the position of manager-sales dept. at **Day-Brite Lighting, Inc.,** St. Louis, Mo. He was formerly central regional sales manager. He was elected a Fellow of IES in 1956 and is the author of "Fluorescent Lighting Manual" published by McGraw-Hill Book Co. in 1942.

J. J. Riggs has been named merchandise manager in the laundry equipment dept. of **Westinghouse Electric Co.**'s major appliance div., Mansfield, Ohio. He formerly was general sales manager for major appliances with Westinghouse Electric Supply Co.

James B. Irwin has been appointed sales manager of **The Radix Wire Co.,** Cleveland, Ohio. He formerly held similar posts with Eastern Insulated Wire Corp, Wallingford, Conn. and the industrial div. of the Hatfield Wire & Cable Co., Hillside, N. J.

E. Fred Bahls has been appointed sales manager of **Philadelphia Electrical & Mfg. Co.,** Philadelphia, Pa. He has been associated with PEMCO for over 23 years and is active in IES and The Electrical Assn. of Philadelphia.

These NEW BUCHANAN Products Mean More PROFITS to you...



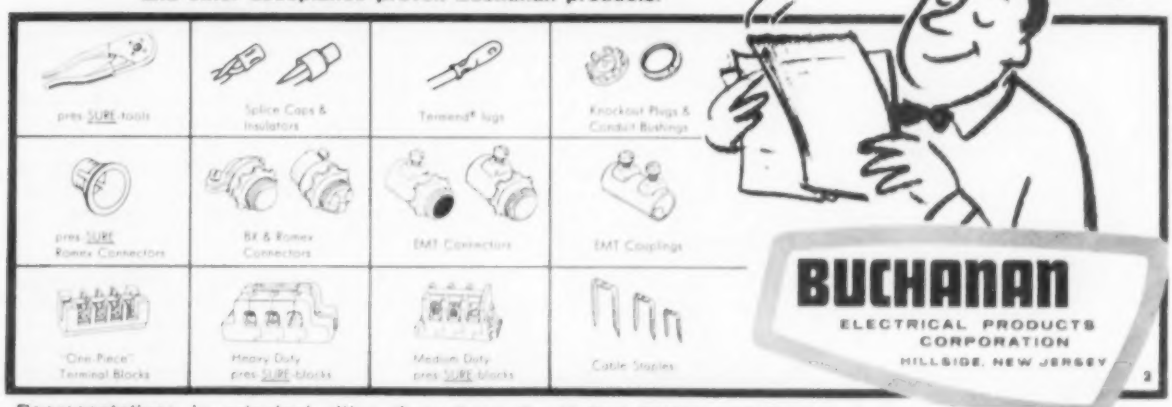
Here's Why!

BUCHANAN "Triple-Tested" EMT Fittings exceed U.L. requirements and *always* insure job satisfaction . . .

Torque Tested!	*Bend Tested!!*	*Pull Tested!!!*
No special tools required	No bending of screws	No loosening in service
No distortion of bodies	No lost screws	No corrosion in service
No spreading of seams	No stripping of threads	No wasted fittings

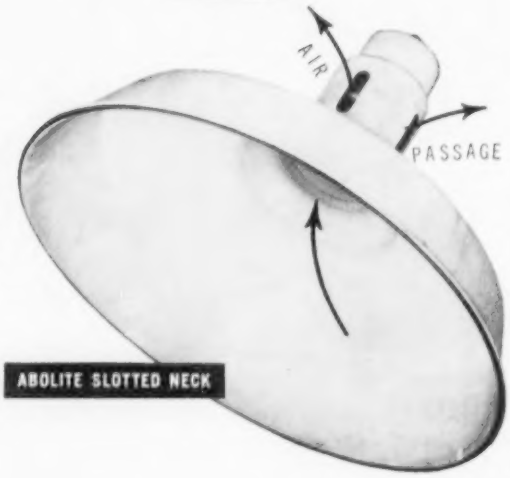
Connectors are available plain,—or with tough plastic throats for added protection to wire insulation.

Write for distributor information on "Triple-Tested" Fittings and other acceptance-proven Buchanan products.



Representatives in principal cities throughout the United States and Canada

Keeping industry bright with ABolite



6-MONTH TEST RESULTS

The photographs show two reflectors after 6 months of side-by-side use in the core department of the James B. Clow and Sons plant, Coshocton, Ohio. Note the heavy deposit of dirt and grime on the non-vented unit, drastically reducing its illuminating value. The Abolite slotted-neck reflector shows minimum dirt deposit; lighting efficiency remains high.

Self-cleaning Abolite fixture gives 30% more light, longer lamp life

The slotted-neck reflector design, by Abolite, greatly increases lighting efficiency and lamp life, cuts maintenance costs way down. Air circulation through the ventilator slots keeps dust and grime on the move. Lamp and reflector stay clean nearly twice as long, give 30% more illumination. Lamp operating temperature is reduced 40%. Make sure you get all these advantages—at no extra cost—by specifying Abolite. For full details on Abolite's complete line of lighting fixtures, write *ABolite Lighting Division, The Jones Metal Products Co., West Lafayette, Ohio.*

ABOLITE LIGHTING

T. C. Vogel, head of the advertising and sales promotion section of **Square D Co.'s** industrial controller div. since 1945, has been promoted to the position of publications specialist for all divisions. He will coordinate catalog programs, direct mail and advertising from his Milwaukee headquarters.

Jack Shearer is manager-sales, connector div. of **Pyle-National Co.,** Chicago, Ill.

Frank E. Rickel is now sales manager of **Pittsburgh Reflector Co.,** Pittsburgh, Pa. He has been the firm's advertising and sales promotion manager since 1952. He is a member of IES and is well known in sales circles.

Frank C. Sweeney was appointed manager at **Graybar Electric Co.'s** Long Island City, N. Y. operation. **J. P. McCarthy** succeeds him as manager at the Newark, N. J. location. **N. F. Clark** is operating manager at Long Island City.

Marvin Reuter has been named advertising and sales promotion manager for **Lappin Electric Co.,** Milwaukee, Wis. wholesaler.

Hal McCoy is distributor field sales specialist for Vornado room air conditioners, produced by the consumer appliance div. of **The O. A. Sutton Corp., Inc.,** Wichita, Kan.

Philip J. Wood has been appointed sales manager-radios and phonographs, for **Zenith Radio Corp.,** Chicago, Ill.

Alden F. Krieg is the new executive manager of the **Northwest Electric Light & Power Assn.** He has been associated with Portland General Electric Co., Portland, Ore., and was on leave from that company to carry on civic work in Portland when tapped for his new post.

Chalmer J. Carothers, Jr., was named to handle national sales of mercury vapor lamps for **Sylvania Electric Products Inc.** His title is product sales manager, special lighting products. He will make his headquarters in Salem, Mass.

Norman Donovan has been advanced to the post of assistant sales manager by the **Daniel Woodhead Co.,** Chicago, Ill.

Donald R. Meckstroth is manager of marketing-package products dept. of **Westinghouse Electric Corp.'s** air conditioning div. He succeeds **John A. Gilbreath,** named manager of the newly organized air conditioning wholesaling dept.

SALES REPRESENTATIVES

The Miller Co., Meriden, Conn., announces appointment of Dean J. Harryman as sales representative for the illuminating division in the Milwaukee, Wis. territory. He was previously an employee of General Electric Supply Co., in Milwaukee.

Pittsburgh Standard Conduit Co., Pittsburgh, Pa. has appointed Ralph B. Black representative for conduit, fittings, etc. for New Mexico and the El Paso, Tex. marketing area. His main office is in Albuquerque, N. M.

The Sessions Clock Co., Forestville, Conn. now lists Kirk's Ltd. of Toronto, Ont. and Winnepeg, Man. as representatives for Sessions clocks in Canada.

Dominion Electric Corp., Mansfield, Ohio has appointed Leuck Sales Service, headed by Niles W. Leuck, Panama City, Fla. to represent Dominion electrical appliances in Florida.

Radiant Lamp Corp., Newark, N. J. lists two new western representatives. Fred Walters Co., 2020 Congress Ave., Houston, Tex. will cover the Texas and Oklahoma territories. Lee-Naylor Co. 2565 S. State St., Salt Lake City, Utah, now represents the firm in Utah.

OBITUARIES

Philip Cass

Philip Cass, president of the Philip Cass Co., Philadelphia, Pa., died Dec. 2 at the age of 81. He founded the wholesaling firm in 1913, and joined NAED in 1933.

W. B. DeForest

W. B. DeForest, 67, retired district sales manager of the Graybar Electric Co. died suddenly on Dec. 22 in Bath, Me. He joined Western Electric Co. in 1909 as a telephone salesman in Kansas City. He was made manager of that house in 1920. In 1926 Mr. DeForest was transferred to the New York house of Graybar as sales manager. His title was changed to district commercial manager in 1943. After his retirement in 1945, he served as special sales representative for the Phelps-Dodge Copper Products Co., until 1949.

Paul A. Meyer

Paul A. Meyer, vice president, secretary and a director of the Michigan Oven Co., Detroit, Mich., died recently at the age of 64. He was a founder of the company and had spent several decades as a heating specialist.

TRINE'S NEW PILOT-LITE PUSH BUTTON

- FOR RINGING CHIMES BELLS, BUZZERS, ETC.
- NARROW
- SOLID BRASS
- HARMONIOUS DESIGN
- LOW PRICED
- BIG BAR electrically lighted (also available without light)

FEATURED ON TRINE'S NO. 1 PUSH BUTTON DISPLAY

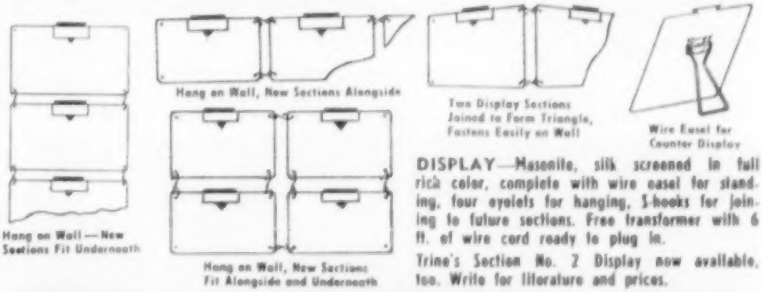
with FREE transformer that lights up pilot-lite push buttons

Trine's new "pilot-lite" available in two types:
No. 25715
for 6 to 16 volts
No. 25724
for 24 Volts
No special wiring required.

DEAL INCLUDES:
Display with 4 samples and introductory backup stock of assorted push buttons.

List Price **$19.75**

This versatile, expandable display is one of a series of new Trine Sectional Displays

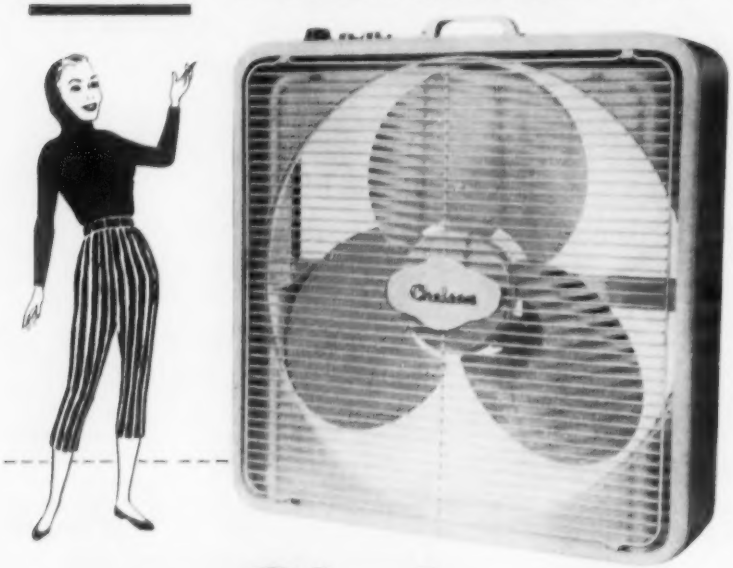


DISPLAY—Masonite, silk screened in full rich color, complete with wire easel for standing, four eyelets for hanging, S-hooks for joining to future sections. Free transformer with 6 ft. of wire cord ready to plug in.

Trine's Section No. 2 Display now available, too. Write for literature and prices.

TRINE MANUFACTURING CORP.
1430 FERRIS PLACE, NEW YORK 61, N. Y.

TO SELL *MORE* FANS *MORE* PROFITABLY . . .



Sell Chelsea in '57!

THE RIGHT MODELS

THE RIGHT FEATURES

THE RIGHT STYLING

THE RIGHT PRICES

Looking for a line that includes window fans, "box" type portables, floor fans and roll-a-bouts? . . . Do your customers demand utility *or* fancy features? . . . Will decorator styling sway the ladies? Do you need a complete range of prices to insure store traffic? . . . Look no further—you'll get all of these in the Chelsea line for '57—each unit top quality and backed by Chelsea's unconditional guarantee!

Plus National and local advertising and Chelsea's famous "10 Point" promotional program that delivers everything you'll need to sell!

CHELSEA
FAN & BLOWER CO., INC.
PLAINFIELD, NEW JERSEY
More than 30 years service to the ventilating industry

OMAHA—The Nebraska-Iowa Electrical Council has elected C. P. Haas of the General Electric Co. lamp div. as its new president. Other new officers include R. W. Staal, Consumers Public Power District, Columbus, Neb., first vice president; Richard Nevotti, Minne Lusa Radio & Appliance Co., second vice president; Charles Rhamey, Dundee Electric, secretary; and Howard Petersen, General Appliance Co., treasurer.

PHILADELPHIA — At the annual election meeting of The Electrical Assn. of Philadelphia, S. M. Cameron was chosen as president for 1957. He is vice president of the Howard P. Foley Co. R. G. Rincliffe, president of the Philadelphia Electric Co. was chosen vice president.

WASHINGTON, D. C.—The Electrical Trade Conference and Exposition scheduled for Feb. 12-14 at the Shoreham Hotel appeared a near sellout reports The Electric Institute, with 150 exhibit spaces occupied. Conference sessions will present an outstanding program of speakers. Another institute activity is the current 10-week course in effective speech being held for electrical salesmen and servicemen.

KANSAS CITY, MO.—William Carter, district sales manager of Anaconda Wire & Cable Co. was elected president of the Electric Assn. of Kansas City for 1957 at the group's 45th annual meeting in December. Elected vice presidents of the various divisions are: utilities—M. A. Havenhill, Kansas City Power & Light Co.; manufacturers—G. E. Messer, General Electric Co.; supply wholesalers—John A. Dunn, General Electric Supply Co.; appliance wholesalers—E. D. Shiffler, also of GESCO; electrical contractors—Frank Cipolla, Monarch Electric Co. Elected to the board of directors were Larry C. Bray, Graybar Electric Co. and Joe Gorman, Continental Electric Co.

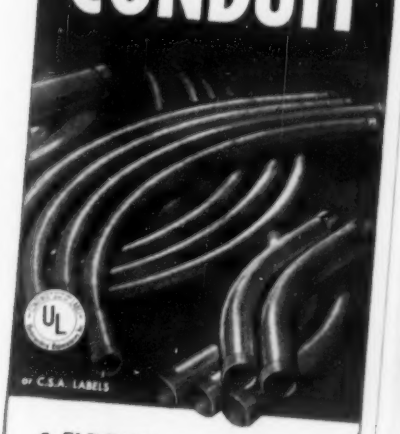
CINCINNATI, OHIO—The Cincinnati Electrical Assn. in cooperation with the city's three local newspapers, is sponsoring the Electric Living Exposition of 1957 at Cincinnati Gardens Feb. 9-17. This will be the first such exposition here since 1939, and it is timed to coincide with National Electrical Week. Residential electrical equipment and appliances will be starred in "The Home in the Clouds" and other exhibits. Admission is free and attendance is expected to reach more than 100,000.

Allis-Chalmers Mfg. Co., Milwaukee, Wis., has named Shealy Electrical Wholesalers, Inc., 3720 N. Main St., Columbia, S. C., as a distributor for A-C transformers in 12 central and northeastern counties in South Carolina. The firm established in Aug. 1956 is a branch of Shealy Electrical Wholesalers of Greenville, S. C.

Automatic Switch Co., Orange, N. J., announced the appointment of McKeever Electric Supply Co., 212 N. Grant Ave., Columbus, Ohio, as authorized stocking distributors of Asco solenoid valves. Also appointed distributors of Asco electromagnetic control equipment in Louisiana is Westinghouse Electric Supply Co., 2538 Poydras St., New Orleans, La.

Norge div., Borg-Warner Corp., Chicago, Ill., has consolidated six counties in Connecticut under the distributorship of The Plymouth Electric Co., with headquarters in New Haven. The added territory includes Litchfield, Hartford and Tolland. Plymouth Electric has handled Norge appliances in Fairfield, New Haven and Middlesex counties for the past two years.

CONDUIT



• ELBOWS – Large Radius, Standard Radius, EMT

PIPE NIPPLES
COUPLINGS
RUNNING THREAD PIPE
WALL PLATES • GOOSENECKS

Write for Catalog

CONDUIT NIPPLE MFG. CO.
1455 Spring Garden Ave. PITTSBURGH 12, PA.

EAGLE BEST SELLERS

FOR FAST SALES AND GOOD PROFITS

There's BIG profits in these small items and every customer is a potential buyer. Powerfully merchandised in self-service displays, these best sellers will be your most consistent profit producers.

SHOW 'EM — THEY SELL THEMSELVES

JIFFY PUSH-PULL PLUG

"The World's Simplest Electric Plug"

Here's the revolutionary New plug that's causing a sensation throughout the country. Perfect for attaching to cords of lamps, radios, appliances, etc. U.L. approved. Merchandised on individual cards (as shown) in display carton of 25, or on display card of 25.

"O.K." GLASS PLUG FUSE

Now the Best Selling "O.K." Fuse merchandised in this New "SHO-PAK" — Visual, Compact, Attractive for Effective Display. Offers complete visibility of fuses, cuts down pilferage and has space for stamping price. Ideal for shelf or open counter.

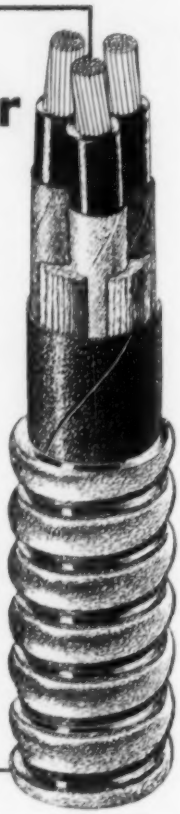
EAGLE ELECTRIC MFG. CO., Inc.
Long Island City 1, New York
Please send me your complete new 1957 catalog & price list. EW-287

FIRM _____
ADDRESS _____
CITY _____ STATE _____

SOLD THROUGH WHOLESALERS ONLY

EAGLE ELECTRIC MANUFACTURING CO., INC.
LONG ISLAND CITY 1 • NEW YORK
"Perfection is not an Accident"

CIRCLOC
interlocked armor power cable



Available in No. 6 AWG to 750 MCM Copper Conductors up to 15,000 volts Varnished Cambric or Butyl Rubber Insulation Steel, Aluminum or Bronze Armor

For quick, easy, economical expansion or relocation of power feeders, specify *Circloc Interlocked Armor Cable.* Installs without conduit on simple supports. Trains easily around corners and obstructions for long runs. Provides its own armor for mechanical protection against damage.

NEW WIRING CALCULATOR—FREE!
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a subsidiary of CERRO DE PASCO CORPORATION

PLANTS: Maspeth and Hicksville, N. Y. SALES OFFICES: In all principal cities.
(Dept. EH2) 5500 Maspeth Avenue, Maspeth, N.Y.

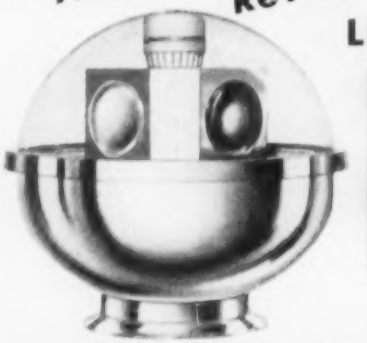
NEW LITERATURE

Panelboard—A new heavy-duty, column-type lighting panelboard, designed for four-wire, 480Y/222-v service, is described in a four-page bulletin just issued. The new publication discusses application of the Type NHBX panelboard, also contains ratings, dimensions, modifications, connection diagrams. Copies of bulletin GEC-1424 can be obtained from General Electric Co., Distribution Assemblies dept., Plainville, Conn.

Lighting Systems—The manufacturer's 1957 condensed catalog features new information on luminous ceilings, modular lighting equipment, pendant mounted fixtures, and the announcement of company's latest development—a high frequency lighting system. The 12-page booklet is printed in two colors with attractive installation photographs and complete layout data. Available from The Wakefield Co., Vermilion, Ohio.

Floor Box—Subject of a new illustrated four-page folder is the "800" series floor box, described as a modern flexible outlet box. Included are dimensional data, photographs and descriptive information on component

Amazing New Revolving **360°** LIGHT SENSATION



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- ★ RESTAURANTS
- ★ DRIVE-IN THEATRES
- ★ TAVERNS
- ★ GOLF RANGES
- ★ FACTORIES
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- ★ CAR LOTS, ETC.

Fascinating just to watch it! Can increase trade 25% or more the day it's installed. Covers 360° like an airplane beacon with a different colored flash each ¾ of a second. Does not conflict with traffic signals. Made like a fine watch to run trouble free indefinitely from 40° below zero to hottest days. Long life 60-watt bulb burns over 2500 hours . . . silent!

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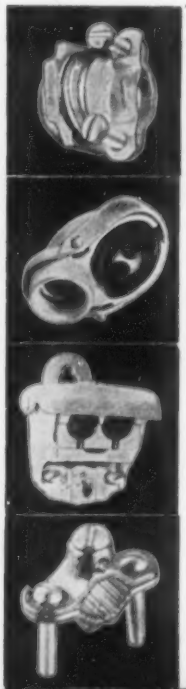

FOR MODERN QUALITY FITTINGS *Specify* ATLANTIC

ATLANTIC CONDUIT FITTINGS COMPANY
BOSTON, MASSACHUSETTS

parts and service fittings. Illustrations show horizontal-cast or monumental design service fittings and list various receptacles available in each design. Folder can be obtained from National Electric Products Corp., Gateway Center, Pittsburgh 22, Pa.

Electrical Connectors—A new "Connector Reference File" presents data on electrical connectors in readily usable form. Each sheet in the series is devoted to a connector type used in power transmission or distribution. File pages, illustrated with photographs and drawings, include brief descriptions of connector applications and design features, also list the range of conductors accommodated. Issued by Burndy Corp., Norwalk, Conn.

Lift Truck Operation—"How to Operate a Lift Truck" is an informative 24-page booklet for truck supervisors, operators, etc. Cartoon technique makes for easy reading. Booklet contains information on basic materials handling, preventive maintenance, safety—and instructions for setting up an obstacle course. Helpful for beginners and experienced operators. Form 1214 may be obtained from Hyster Co., 2902 N. E. Clackamas St., Portland 8, Ore.

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There is nothing complex or intricate about "Latrobe" Floor Boxes and Wiring Specialties.

Their design and mechanism is kept simple and sure.

That is why "Latrobe" products are so quick to install and so trouble-free in operation.

Non-Adjustable Watertight Floor Box

Unique, practical design cuts installation time; makes safer job and leaves more wire space inside box. Cover Plate is 3½" diameter.

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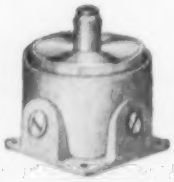

Designed for telephone outlet or where permanent connections are made, or as a junction box. All adjustable boxes are fire proof.

Insulator Supports

Fasten porcelain or glass insulators to steel framework without punching holes. 3 sizes—1", 1½", 2" and 2½".

Keystone Fish Wire

Ten sizes — for lightest work to heaviest power wiring. 100, 150, and 200 foot coils.

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Adjustable Floor Boxes
Gang Boxes . . . Cover Plates
Junction Boxes . . . Nozzles
Pipe or Conduit Hangers
Insulator Supports
Cable Supports . . . Fish Wire
Staple and Cable Clips

Write for new catalog

Sales Representatives in all principal cities.

Fullman Manufacturing Co.
1209-1215 JEFFERSON STREET
LATROBE, PA.

Push Buttons—"How to select the right push button for every application" is the theme of a 32-page catalog covering oil tight and general purpose push buttons, pilot lights and accessories. Catalog includes description of components and complete units, dimensions, cam action and schematic diagrams. All types and styles are illustrated with photographs. Furnas Electric Co., Batavia, Ill.

Office Lighting—An illustrated folder covers the problems and solutions in planned lighting for Norwalk offices of the Connecticut Light and Power Co. The folder points up new trends in fixture design and placement, based on seeing requirements of various areas of the building. Issued by The Fullerton Mfg. Co., Norwalk, Conn.

Lighting Fixtures—A 400-page catalog covers manufacturer's overall line of lighting fixtures for industrial and commercial requirements. Includes information on new items such as slim, latchless fluorescent troffers and incandescent Displayolites for accent lighting. Complete specifications and illumination data are given. For a copy of catalog No. 55, write Ruby-Philite Corp., 32-02 Queens Blvd., Long Island City 1, N. Y.

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25 North Peoria Street—Chicago 7, Illinois

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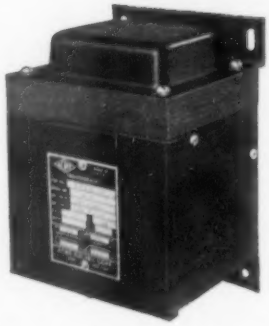
WHO'S BUYING BOOST & BUCK TRANSFORMERS ?



Whenever a 220/230/240 volt single phase circuit must be tapped from a power transformer to supply current to an air conditioner, exhaust blower, or other equipment driven by a 230 volt single phase motor, then there is a need for an Acme Boost and Buck Transformer.

Under the conditions indicated above, a 208 voltage supply would be obtained from the transformer connection. This is usually much too low to allow satisfactory performance of a motor rated at 220/230 or 240 volts.

To correct this low voltage condition, an Acme Electric Boost and Buck transformer connected to the supply line can increase voltage to the normal operating voltage required.

There are hundreds of sales opportunities for Acme Electric Boost and Buck transformers. Bulletin BB-199 gives you complete details.

? ARE YOU SELLING THEM

ACME ELECTRIC CORPORATION
672 WATER STREET CUBA, NEW YORK

Acme Electric
TRANSFORMERS

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New elevating tail gate for pick-up trucks is known as the "Watson Weightlifter." It is said to be easily loaded from either side (for parallel curb parking) as well as from the back. It is hand winch-operated with 650-lb lifting capacity. Automatic load brake is in operation at all times. According to the manufacturer installation takes only 3-4 hrs and the "Weightlifter" can be easily reinstalled on other trucks.

Payroll Tax Computer

Calcu-Tax Corp., 49 W. 37th St., New York 18, N. Y.

Device is designed to cut in half the time required to prepare weekly payrolls, according to the company. It shows withholding tax and the new social security deductions for wage brackets up to $250—without turning pages or making calculations. No special skill or practice is required, it is stated. Replacements available as tax rates change.

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PREFERRED BY THE EXPERTS

Super — SUPEREAMER
WITH THE NEW TWIST!

XCELITE
Imagination
KEEPS YOU AHEAD

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XCELITE, INCORPORATED
Dept. A, Orchard Park, N. Y.

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CLAMP AND LOCK YOUR CONNECTIONS THE K&H WAY

This
SWIVEL U-BOLT CONNECTOR
is designed to do just that . . .

No Removable Parts
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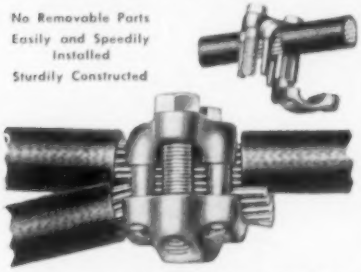

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• Jackson Yardlights are impervious to wind and weather and truly last a lifetime. Made of one-piece heavy gauge steel finished in three coats of Vitreous Porcelain Enamel. Completely wired and assembled. Listed by U. L. Approved for R. E. A. installations.

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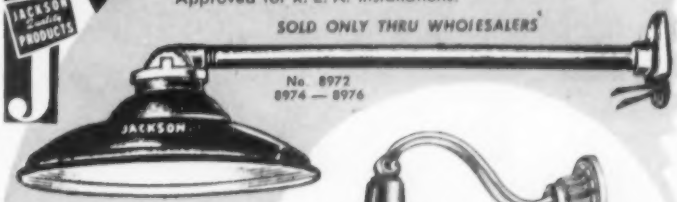

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Finish glossy black porcelain enamel outside, white inside. Designed for better grade homes, garages and public buildings. Made with cast ALUMINUM ARM and CANOPY. Will last a lifetime. Overall length 15", depth 7½". Completely wired and packed in individual cartons.

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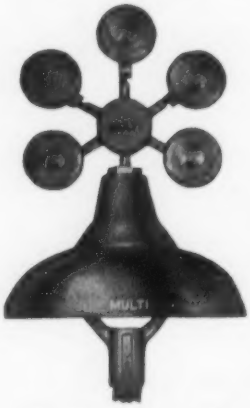
MULTI

FOR PARKING AREA LIGHTING



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Distributors can recommend this MULTI combination unit
No. GA-3785
For lasting satisfaction

500 watt Reflector has lifetime
Porcelain enameled finish
Lampholders for PAR Lamps and splice box is cast aluminum—

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Bulletin on Lighting Equipment

MULTI ELECTRIC MFG. INC.
4223 W. LAKE ST. CHICAGO 24

Portable Blueprinter

Product Engineering Laboratories Co., Inc., 314 Adams St., Newark 5, N. J.

The PELprinter "60" is said to be the first truly portable blueprint machine. Weighs 5½-lb, measures 18x9½x4-in, comes in a luggage-type unbreakable plastic carrying case. It operates by a dry vapor process and reproduces any type of drawing or written matter up to 8½x14-in in less than 1½-min, at a cost of approximately 1c per copy sheet. It is listed as an aid to field technical men and salesmen, also to office employees. Requires 110-v outlet for operation, can also be adapted for use in automobiles.

Street Maps

Hearne Bros., National Bank Bldg., Detroit 26, Mich.

Up-to-date wall maps (size 44x65-in) of all cities, counties and states are available for routing trucks "the shortest way" on every trip thus saving time and gasoline, making it easy for salesmen to locate prospects and make more calls in less time. Maps, printed in six colors, have street names in bold type, also automatic street finder in border. Brochure available without obligation.

How to Sell Against Tough Competition

Harry Kuesel
Prentice-Hall, Inc.
Englewood Cliffs, N. J.

Includes material on methods of ignoring, eliminating, out-thinking and surmounting competition; seven ways to arouse the interest of stubborn prospects; five approaches that bypass the brush-off; and other techniques claimed useful in selling to today's market.

207 pages

Reading Improvement for Adults

Paul D. Leedy
McGraw-Hill Book Co.
New York, N. Y.

Everyone in business—executive, manager, salesman—is likely to find more books, magazines, reports, etc., on his desk than he can possibly keep up with. The answer—says the author—is to learn to read more easily, swiftly, comprehendingly. Mr. Leedy, who runs New York University's Reading Institute and has conducted reading courses for executives of top industrial firms, says the average adult reads 200-250 words per minute and cites the example of trained readers reaching over 800 wpm. Improvement is

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(SERIES 130 RELAY)
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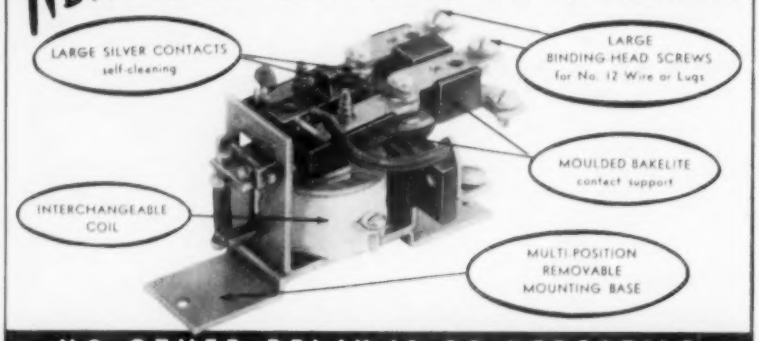

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CONTACTS	RATINGS	COILS	MOUNTING BASE
Single-and-double pole	20 amp. at 115 V	AC & DC to 230 V	Metal strap or bakelite.
Single-and-double throw	60 Cy. AC or 24 V DC	(Interchangeable)	Base can be rotated 90 degrees either direction for mounting convenience.
Aux. DT contacts available	U.L. Approved	Power—2 watts	

DIMENSIONS Base—1" x 3⅛"

Request complete data on Series 130 Relay.

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RELAYS WS LONG BRANCH, N. J.

tied to both reading speed and reading comprehension. He shows how both eye and mind must be trained, how to adjust reading speed to material.

456 pages

J. K. Lasser's Standard Handbook of Business Tax Techniques

J. K. Lasser Tax Institute
McGraw-Hill Book Co.
New York, N. Y.

How the businessman can avoid overpaying his business income tax is the theme of this volume. It gives the implications of the latest tax law, Treasury regulations and recent interpretations. The intent is to show how the tax laws affect business decisions and how they in turn will affect your taxes. There are examples of tax questions in relation to dividends, advertising, compensation, rent and many other items —with pointers on how to choose the right course where tax alternatives can result in a larger or smaller tax, a tax deferral, or no tax. The reader learns how to proceed on his own, when expert advice is advisable and how to get the most out of experts' services.

568 pages

SALES AIDS

Comet Lamp Co., 509 Fifth Ave., New York, N. Y.—Colorful new display offered to distributors, gratis, features Trac-O-Lite, the sliding track that accepts any pull down fixture.

Vaco Products Co., 317 E. Ontario St., Chicago 11, Ill.—"Vaco Tool Center" is a tool-display unit that provides utility, convenience, tool organization and customer appeal, according to the tool manufacturer. Perforated back panel offers 14-sq ft of display space, 48x15x18-in storage cabinet provides ample space for shelf stock. Available with or without merchandise to tool suppliers in electrical, hardware, building fields.

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P. O. Box 12, New York 36, N. Y., for March issue closing February 7th

Replies (Box No.): Address for office nearest you c/o This publication Classified Adv. Div.
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CHICAGO: 520 N. Michigan Ave. (11)
SAN FRANCISCO: 68 Post St. (4)

POSITION VACANT

One of the oldest and best independent Wiring Supply and Appliance distributors operating in 4 smog-free cities in Southern California needs experienced Salesmen and Countermen. Send complete information with photo to: Electric Supplies Distributing Co., Box 1310, San Diego 12, Calif. Confidential.

SELLING OPPORTUNITY OFFERED

Representative calling on Wholesalers and Jobbers, wanted for a quality line of die-cast conduit and cable fittings in the following areas: New England States, North and South Carolina, Georgia, Florida, Ohio, Illinois, Alabama, New York State, Virginia, West Va. Please state exact areas covered and other lines carried. RW 3765, Electrical Wholesaling.

POSITION WANTED

Young man, early thirties, 8 years with same elec. supply house. Outside selling and office management experience, desires to relocate either in Florida or California. Reply PW 3993 Electrical Wholesaling.

SELLING OPPORTUNITIES WANTED

Established Manufacturer's Representative needs additional top staple shelf line, selling Electrical Wholesaler Florida exclusively. RA 3619, Electrical Wholesaling.

Established Manufacturers Sales Representative traveling the State of Virginia, with excellent distributor accounts, desires reputable line of Rigid and EMT Conduit. Since territory traveled, is comparatively small, can give intensive and frequent coverage. Reply to RA-3943, Electrical Wholesaling.

Your inquiry will have Special Value . . .

If you mention this magazine, when writing advertisers. Naturally, the publisher will appreciate it . . . but, more important, it will identify you as one of the men the advertiser wants to reach with this message . . . and help to make possible enlarged future service to you as a reader.

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PROMINENT MIDWEST MANUFACTURER OF MECH-ELECT. EQUIPMENT DESIRES REPRESENTATION ON COMMISSION BASIS IN SEVERAL EASTERN AND SOUTHERN TERRITORIES.

Reply RW-3997
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520 N. Michigan Ave., Chicago 11, Ill.

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National manufacturer of complete line cable and conduit fittings has opening in the following territories for experienced and aggressive salesmen:

Minnesota	Western Missouri
Wisconsin	West Virginia
Kansas	Maryland
Nebraska	District of Columbia
Iowa	Western Pennsylvania
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In writing give complete resume of experience and firms now representing. Sales manager will arrange for personal interview in the territory.

SW-4009 Electrical Wholesaling
Class. Adv. Div. P.O. Box 12, N. Y. 36, N. Y.

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We have several lucrative sales territories open for experienced and aggressive ventilating fan, range hood and electric chime salesmen.

In writing, a complete resume of past experience in this field together with territory desired is requested.

Knowledge of sales methods with electrical wholesalers and missionary work to contractors, builders, etc., is necessary.

Write: William T. Steele,
Sales Manager, Fan Division,

Progress Manufacturing Company, Inc.,
Castor Avenue and Tulip Street
Philadelphia 34, Penna.

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OPEN · CLOSE · LOCK DOORS, GATES
...Electronically

COMMERCIAL, INDUSTRIAL
RESIDENTIAL & SPECIAL
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HANDY BOX with MOUNTING BRACKET

1¼" deep.—Made with new type angle bracket for quick, accurate installations.

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Oval type, threaded, for standard rigid conduit. In ½", ¾" and 1" Covers and gaskets available in various sizes and types.

ARROLET products are available in an unlimited number of combinations, types, sizes and wiring capacities to fit any job specification.

When you have an installation problem not covered by our standard line, our engineers will design special units to your specifications.

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Arrolet CORPORATION

MONTGOMERY PENNA.

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